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OM protein - protein search, using sw model

March 10, 2005, 10:55:58 ; Search time 66.0263 Seconds (without alignments) 76.150 Million cell updates/sec Run on:

US-09-766-412-30 66 1 QPVLHLVALNTPL 13 Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

2105692 segs, 386760381 residues Searched:

2105692 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

A_Geneseq_16Dec04:*
1: geneseqp1980s:*
2: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2001s:*
6: geneseqp2003s:*
7: geneseqp2003bs:*
8: geneseqp2003bs:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Description	Aab74256 Exemplary	Aab80862 Angiostat	Abg97539 Antiangio	Aaw16596 N-termina	Aay94321 Mouse end	Aam48821 Endostati	Ada43206 Mouse end	Adm99393 Human end	Aab49806 Murine en	Aab35584 Antiangio	Aab71931 Murine si	Aam49504 Mouse end	Aay18409 Endostati	Aay08689 Murine en	Aay70258 Murine an	Aab49380 Murine en	Abg31793 Human end	_	Aay06197 Anti-angi	Aab28398 Murine en	Aau77950 Amino aci	Aae02031 Murine en	Aab71930 Murine en	Abb79902 Mouse end	Adn00602 Murine en
ID		AAB80862	ABG97539	AAW16596	AAY94321	AAM48821	ADA43206	ADM99393	AAB49806	AAB35584	AAB71931	AAM49504	AAY18409	AAY08689	AAY70258	AAB49380	ABG31793	ABU64290	AAY06197	AAB28398	AAU77950	AAE02031	AAB71930	ABB79902	ADN00602
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ALIGNMENTS

SQ Sequence 13 AA;				DR WPI; 2001-257785/26.	Anti-angiogenesis; plasminogen; VEGF; vascular endothelial			(first entry) Li-angiogenic peptide #30. 2000WO-SG000131. 99SG-00004310. SINGAPORE NAT. SINGAPORE NAT. Prising a portion of a protein selected from plasminogen, VEGF, FLT-1 and KDR/FLK-1 are useful for treating primary. E 18; 34pp; English. Linvention relates to anti-angiogenesis peptides from a selected from plasminogen, endostatin, VEGF or FLT-1. The used to prevent or treat primary tumour growth or metasta angiogenesis
	Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides portion of a selected from plasminogen, endostatin, VEGF or invention is used to prevent or treat primary tumour growth or undesired analogenesis	tumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from portion of a selected from plasminogen, endostatin, VEGF or FUI invention is used to prevent or treat primary tumour growth or or undesired angiogenesis	endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating prumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from portion of a selected from plasminogen, endostatin, VEGF or FL/or invention is used to prevent or treat primary tumour growth or or undesired angiogenesis	Peptides comprising a portion of a protein selected from plasm; endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating ptumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from portion of a selected from plasminogen, endostatin, VEGF or FL/or invention is used to prevent or treat primary tumour growth or or undesired angiogenesis	Homo sapiens. WO200118030-A2. 15-WAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UVSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from plasm; endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating g tumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from plasminogen, endostatin, VEGF or FL; invention is used to prevent or treat primary tumour growth or or undesired angiogenesis	Anti-anglogenesis; plasminogen; VEGF; vascular endothelial grow FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from plasm; endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating g tumor growth. Claim 7; Page 18; 34pp; English. Claim 7; Page 18; 34pp; English. The present invention relates to anti-anglogenesis peptides from portion of a selected from plasminogen, endostatin, VEGF or FL; invention is used to prevent or treat primary tumour growth or or undesired anglogenesis	Anti-angiogenesis; plasminogen; VEGF; vascular endothelial grow FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UVSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from plasm; endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating g tumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from plasminogen, endostatin, VEGF or FL/F invention of a selected from plasminogen, endostatin, VEGF or FL/F invention is used to prevent or treat primary tumour growth or or undesired angiogenesis	
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03-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from plasm; endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating ptumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from portion of a selected from plasminogen, endostatin, VEGF or FL/invention is used to prevent or treat primary tumour growth or or undesired angiogenesis				03-SEP-1999; (UYSI-) UNIV SI Ge R, Kini RM;	Fil-1; cumouf; mecascasis; Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG00013	Anti-anglogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131.	Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131.	
UVSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from plasm: endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating tumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from portion of a selected from plasminogen, endostatin, VEGF or FL; invention is used to prevent or treat primary tumour growth or or undesired angiogenesis				03-SEP-1999; (UYSI-) UNIV SI: Ge R, Kini RM;	Fil-1; cumouf; mecascasis; Homo sapiens. WO200118030-A2. 15-WAR-2001.	Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2.	Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2.	2000WO-SG000131.
01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from plasm; endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating is tumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from plasminogen, endostatin, VEGF or FLJ invention of a selected from plasminogen, endostatin, VEGF or FLJ invention is used to prevent or treat primary tumour growth or or undesired angiogenesis				_	Fil-1; tumouf; mecastasis; Homo sapiens. WO200118030-A2.	Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2.	Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2.	
01-SEP-1909; 99SG-00004310. (UVSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from plasm; endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating it tumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from plasminogen, endostatin, VEGF or FL/portion of a selected from plasminogen, endostatin, VEGF or FL/portion of a selected from plasminogen, endostatin, VEGF or FL/portion of sueed to prevent or treat primary tumour growth or or undesired angiogenesis					FDI-1; tumbul; metastasis; Homo sapiens. WO200118030-A2.	Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens.	Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens.	
15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UVSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from plasmiendostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating plumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from plasminogen, endostatin, VEGF or FLinvention of a selected from plasminogen, endostatin, VEGF or FLinvention is used to prevent or treat primary tumour growth or or undesired angiogenesis				_	Fil-1; Cumouf; mecascasis; Homo sapiens.	Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens.	Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens.	. 70
15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UVSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from plasmi endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating plumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from plasminogen, endostatin, VEGF or FLi invention is used to prevent or treat primary tumour growth or or undesired angiogenesis				_	Homo sapiens.	Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens.	Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens.	Ç
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Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Gp R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from plasm: endostatin, VEGF, FLT-1 and KDR/FUK-1 are useful for treating it tumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from plasminogen, endostatin, VEGF or FLT portion of a selected from plasminogen, endostatin, VEGF or FLT portion of a selected from plasminogen, endostatin, VEGF or FLT portion of a used to prevent or treat primary tumour growth or or undesired angiogenesis						Anti-angiogenesis, plasminogen, VEGF; vascular endothelial	Anti-anglogenesis; plasmingen; VEGF; vascular endothelial	(atapaga) (4
Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial grow FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UVSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from plasm; endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating is tumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from plasminogen, endostatin, VEGF or FLI invention of a selected from plasminogen, endostatin, VEGF or FLI invention is used to prevent or treat primary tumour growth or or undesired angiogenesis	Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 01-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from piendostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treat	Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-WAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Gp R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from p	Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-WAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26.	Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Ge R, Kini RM;	Exemplary anti-angiogenic peptide #30.			(first entry)
Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial grow FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from plasm; endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating is tumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from plasminogen, endostatin, VEGF or FLY invention of a selected from plasminogen, endostatin, VEGF or FLY invention of a selected from plasminogen, endostatin, VEGF or FLY invention is used to prevent or treat primary tumour growth or or undesired angiogenesis	23-MAY-2001 (first entry) Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from piendostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treat	23-MAY-2001 (first entry) Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 01-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Gp R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from p	23-MAY-2001 (first entry) Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26.	Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-WAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Ge R, Kini RW;	23-MAY-2001 (first entry) Exemplary anti-angiogenic peptide #30.		23-MAY-2001	
AMEYALSO; 23-MAY-2001 (first entry) Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial grow FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 01-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from plasm; endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating is tumor growth. Claim 7; Page 18; 34pp; English. The present invention relates to anti-angiogenesis peptides from plasminogen, endostatin, VEGF or FLY invention of a selected from plasminogen, endostatin, VEGF or FLY invention is used to prevent or treat primary tumour growth or or undesired angiogenesis	AAB 74256; 23-MAY-2001 (first entry) Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from piendostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treat	AAB/4256; 23-MAY-2001 (first entry) Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 01-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Gp R, Kini RM; WPI; 2001-257785/26. Peptides comprising a portion of a protein selected from p	AAB/4256; 23-MAY-2001 (first entry) Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Ge R, Kini RM; WPI; 2001-257785/26.	AAB/4256; 23-MAY-2001 (first entry) Exemplary anti-angiogenic peptide #30. Anti-angiogenesis; plasminogen; VEGF; vascular endothelial FLT-1; tumour; metastasis; cancer. Homo sapiens. WO200118030-A2. 15-MAR-2001. 01-SEP-2000; 2000WO-SG000131. 03-SEP-1999; 99SG-00004310. (UYSI-) UNIV SINGAPORE NAT. Gp R, Kini RM;	AAB/4256; 23-MAY-2001 (first entry) Exemplary anti-angiogenic peptide #30.		AAB/4256; 23-MAY-2001	
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The invention discloses a peptide comprising a portion of a protein e.g. plasminogen, endostatin (Endo-1-4), vascular endothelial growth factor (VEGEP, FIL-1 or kinase insert domain containing receptor/FLK-1. These peptides are able to act as potent angiogenic inhibitors (Angio-1-5) inhibiting endothelial cell proliferation and retarding tumour growth. CC Angiogenesis is the process of new blood vessel formation from precessing the structures. It plays an important on ingration and assembly into tubule structures. It plays an important role in normal physiological functions such as embryonic development and wound healing. Inappropriate angiogenesis is also associated with various pathological conditions including tumour growth and metastasis, rheumatoid arthritis and psoriasis. Anticancer therapy by inhibiting tumour angiogenesis is called antiangiogenic therapy by inhibiting tumour angiogenesis full provided by protein-protein interactions are crucial to many physiological and pharmacological processes and the peptides disclosed interfere with these interactions. The peptides and the pestides disclosed interfere with these interactions. The peptides are useful for preventing metastasis. The sequences presented in ABG97510-ABG97559 are examples of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Endostatin; angiogenesis; cancer; tumour; rheumatoid arthritis; psoriasis; ocular; Osler-Webber Syndrome; myocardial; telangiectasia; plaque neovascularisation; haemophiliac joint; angiofibroma; inhibitor; wound granulation; intestinal adhesion; atherosclerosis; scleroderma; hypertrophic scar; cat scratch disease; Rochele minalia quintosa; Helicobacter pylori ulcer; birth control; collagen alpha type XVIII.
                                                                                                                                                                                                                                                                                                                                                                                                                              Novel peptide for preventing/treating undesired angiogenesis, has a portion of a protein e.g. plasminogen, endostatin, and potent antiangiogenic activity and endothelial cell proliferation inhibition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 66; DB 5; Length 13; 100.0%; Pred. No. 3.5e-05; ive 0; Mismatches 0; Indels
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30-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence is a peptide which is effective in inhibiting undesirable angiogenesis. Angiogenesis is the process of new blood vessel formation from pre-existing vessels. Inappropriate angiogenesis is associated with various pathological conditions including solid tumour growth and metastasis. The present peptide can be used to to prevent tumour metastasis or inhibit the growth of a primary tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptides having potent anti-angiogenic activity, useful for the treatment of tumors, comprise a portion of a {\rm FLT-1} protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Angiogenesis; plasminogen; endostatin; Endo-; VEGF; vascultar endothabial growth factor; FLT-1; kinase insert domain; FLK-1; angiogenic inhibitor; Angio-; endothelial cell; proliferation; tumour growth; blood vessel formation; migration; tubule structure; embryonic development; wound healing; tumour metaetssis; rheumatoid arthritis; psoriasis; anticancer; therapy; antiangiogenic therapy; mitogen; tyrosine kinase receptor.
                                                                                                                                                                                                                                                                                                                         Cytostatic; angiogenesis inhibitor; tumour metastasis; tumour growth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Col 15-16; 21pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABG97539 standard; peptide; 13 AA.
                                                                                                                         AAB80862 standard; peptide; 13 AA
                                                                                                                                                                                                                                                                             Angiostatin-derived peptide #19.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-00385442.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-0099313P
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                                                                                                                                                                                                                          (first entry)
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OPVLHLVALNTPL 13
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 13 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                            Unidentified
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                                                                                                                                                                                                                          29-MAY-2001
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                                                                                                                                                                        AAB80862;
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WO200026368-A2
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Best Local S
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요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            proliferation was isolated and is characterised by its preferred National amino acid sequence. The present sequence represents the first confideration acid sequence. The present sequence corresponds to an incernal 20 amino acid fragment found in mouse collagen alpha type XVIII starting at amino acid fragment found in mouse collagen alpha type XVIII starting at amino acid fragment found in human alpha I type XVIII starting at amino acid fragment found in human alpha I type XVIII starting at amino acid fragment found in human alpha I type XVIII starting at amino acid 1132 and ending at amino acid 1151. Endostatin can be isolated from murine hemangioendothelioma. The endostatin can be used to treat angiogenesis related diseases, e.g. angiogenesis dependent cancers, benign tumours, rheumatoid arthitis, psoriasis, collar angiogenesis benign tumours, rheumatoid arthitis, psoriasis, collar angiogenesis of iseases, ogler-Webber Syndrome, myocardial angiogenesis, plaque neovascularisation, telangiecteaia, haemophiliac joints, angiofibroma, wound granulation, incestinal adhesions, atherosclerosis, scleroderma, the endostatin can also be used to prevent embryo implantation, i.e. in birth control
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mouse; endothelial cell proliferation inhibitor; collagen XVIII; angiogenesis inhibitor; anti-tumour; cytostatic; antipsoriatic; vasotropic; determatological; ophthalmological; vulnerary; antiarteriosclerotic; antidiabetic; haemostatic; contraceptive; ocular angiogenic disease; ahterosclerosis; scleroderma; myocardial angiogenesis; telangiectasia; angiofibroma; wound granulation.
                                                                                                                                                                                                                                         Isolated endostatin - useful for treating, e.g. angiogenesis dependent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                        novel 20kDa endostatin that specifically inhibits endothelial cell
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY94321 standard; peptide; 20 AA
                                                                                                                                                                                                                                                                              Claim 3; Page 56; 84pp; English
                                                                                              95US-000583SP.
96US-0023070P.
96US-0026263P.
                                                                                                                                                              (CHIL-) CHILDRENS MEDICAL CENT
                                                                                                                                     96US-00740168.
                                                                        96WO-US016925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mouse endostatin N-terminus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-AUG-2000 (first entry)
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                                                                                                                                                                                      Folkman MJ;
                                                                                                                                                                                                              WPI; 1997-259020/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 AA;
                     WO9715666-A1
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                                                                                                            02-AUG-1996;
17-SEP-1996;
                                                                     23-OCT-1996;
                                                                                                                                      22-OCT-1996;
                                              01-MAY-1997
                                                                                                                                                                                      Oreilly MS,
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Mus sp
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specific process in vivo. The sequence corresponds to a C-terminal fragment of newly identified collagen type XVIII. Recombinant mouse endostatin (20 mg/kg) was administered subcutaneously to mice implanted with Lewis lung carcinomas. There was tumour mass regression non-detectable levels after 12 days of therapy due to the anglogenesis inhibitory activity of endostatin. Thus the protein is useful for treatment of anglogenesis-dependent cancers. The polynucleotide and polypeptide sequences of this endostatin are useful for treatment of majogenesis, plaque neovascularisation, telangiectasis, myocardial anglogenesis, plaque neovascularisation, telangiectasia, haemophiliac joints, anglofibroma and wound garanulation, for treatment of diseases related to excessive or abnormal stimulation of endothelial cells e.g. intestinal adhesions, atherosclerosis, scleroderma. The protein may also be useful as a birth control agent by reducing or preventing uterine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel endostatin capable of inhibiting endothelial cell proliferation and angiogenesis, useful for treating angiogenesis-dependent cancers and as birth control agents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         vascularisation. The gene for endostatin may be isolated from cells or tissue that express high levels of endostatin, eg. tumour cells, by generating cDNA from mRNA using reverse transcriptase and then amplifying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               psoriasis; scleroderma; Crohn's disease; corneal disease; retinopathy; arthritis; wound healing; Helicobacter pylori; peptic ulcer; gene therapy; angiostatin antagonist; endostatin antagonist; antiantiangiogenic; cytostatic; antiarthritic; antilnflammatory; cerebroprotective; antidiabetic; virucide; antipyretic; vulnerary; gynaecological; cat scratch fever.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence is the N-terminus of an endostatin, a potent and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 2; 68pp; English.
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                                                                                                                                                                                                                                                                         (CHIL-) CHILDRENS MEDICAL CENT
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                                                                                99WO-US025605
                                                                                                                                                                                                 99US-00315689
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                                                                                                                                                                                                                                                                                                                                                             O'reilly MS, Folkman MJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 100 es 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-365617/31
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                                                                                                                                                                                                 20-MAY-1999;
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                                                                                01-NOV-1999;
                                                                                                                                                           30-OCT-1998;
11-MAY-2000
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The invention relates to an isolated mouse endostatin (potent inhibitor endothelial proliferation). Also include are a compound comprising an isolated nucleic acid sequence encoding the endostatin protein (or an isolated antibody capable of specifically binding to endostatin protein), treating an angiogenesis-related disease, treating angiogenesis-dependent cancer, a method of birth control, a composition comprising angiostatin contect and endostatin and making the endostatin protein. The endostatin is useful for preparing a composition for treating an angiogenesis-related disease, e.g. angiogenesis-dependent cancer, psoriasis, wound granulation or atherosclerosis. Microsequence analysis of the 20 kDa inhibitor of capillary endothelial cell proliferation from the conditioned media or revealed identity to a C-terminal fragment of collagen XVIII. An 18-amino condition and making the conditioned media coll nubibitor of capillary endothelial cell proliferation confirmed that it was identical to a C-terminal fragment of the NCI domain. The present inhibitory fragment of collagen XVIII was named endostatin. The present inhibitory fragment of the isolated endostatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   haemangioma, leukaemia, metastasis, telangiectasia, psoriasis, scleroderma, pyogenic granuloma, myocardial anglogenesis, plaque neovascularisation, coronary collateral argingenesis, corneal disease, arteriovenous malformation, ischaemic limb angiogenesis, corneal disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cytostatic; vulnerary; vasotropic; antipsoriatic; dermatological; cardiant; ophthalmological; antidiabetic; antiarthritic; antiulcer; osteopathic; gynaecological; contraceptive; endostatin; sucrose octasulfate; angiogenesis inhibitor; endostatin proliferation inhibitor; endostatin biosynthesis; anti-angiogenic compound; collagen type XVIII; endothelial cell-related disorder; angiogenesis related disease; cancer; endothelial cell-related disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rubeosis; necvascular glaucoma; diabetic retinopathy; retrolental fibroplasia; arthritis; diabetic necvascularisation; macular degeneration; wound healing; peptic ulcer; fracture; keloid; vasculogenesis; haematopoiesis; ovulation; placentation; menstruation;
                                               New endostatin, useful for preparing a composition for treating an angiogenesis-related disease, e.g. angiogenesis-dependent cancer, psoriasis, wound granulation or atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 66; DB 7; Length 20; 100.0%; Pred. No. 5.7e-05; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human endostatin N-terminal peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADM99393 standard; peptide; 20 AA.
                                                                                                                                                       Claim 3; Fig 5; 35pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-JUL-2004 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          birth control; human.
WPI; 2003-635177/60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to methods of regulating angiogenesis in an individual by administering an angiogenesis regulating composition comporation are uncomposition are useful for treating discusses mediated by angiogenesis including hammangioma, solid tumours, blood bourne tumours, leukaemia, metastasis, Crohn's disease, coronary or cerebral collaterals, arthritis, diabetic neovascularisation, and are strictis, diabetic neovascularisation, menstruation, wound healing, Helicobacter related diseases, ovulation, menstruation, and cat scratch fever. The present sequence is a peptide described in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                    Regulating angiogenesis and treatment of angiogenesis-mediated diseases, e.g. hemangioma, tumors or cancer, by administering a tropomyosin binding compound or actin disrupting compound.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mouse, endostatin; N-terminus; cytostatic; antipsoriatic; vulnerary; antiarterioscolerotic; angiogenesis-related disease; angiogenesis-dependent cancer; birth control; psoriasis; wound granulation; atherosclerosis; collagen XVIII.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 13; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADA43206 standard; peptide; 20 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-SEP-2002; 2002US-00232316.
                                                                                                        04-JUN-2001; 2001WO-US017947.
                                                                                                                                                          02-JUN-2000; 2000US-0209065P.
08-MAY-2001; 2001US-0289387P.
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Best Local Similarity 100...
Local 3j Conservative
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                                                                                                                                                                                                                                                                                     Sim KL, Macdonald NJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OREI/) O'REILLY M S.
                                                                                                                                                                                                                                      (ENTR-) ENTREMED INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FOLKMAN M J.
                                                                                                                                                                                                                                                                                                                                    WPI; 2002-130569/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2003087393-A1.
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       WO200193897-A2
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                                                         13-DEC-2001
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The present invention provides endostatin peptides which can be used in the modulation of angiogenesis. This is useful in the treatment of cancers, inflammation, rheumatiof arthritis, chronic articular rheumatism, psoriasis, disorders associated with inopportune invasion of prematurity, macular degeneration, corneal graft rejection, retrolental fibroplasia, rubosois, capillary proliferation in atherosclerotic plaques and osteoporosis. Other angiogenesis-dependent algaeses include Osler-Webber syndrome, mycoardial angiogenesis, plaque neovasculisation, telangiectasia, haemophilac joints and wound granulation. In addition, the peptides can be used as birth control
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes a number of peptides derived from endostatin which exhibit antiangiogenic activity. These may be used in the treatment of cancer. The present sequence is one of the peptides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Polypeptides derived from endostatin exhibiting antiangiogenic activity useful for treatment of angiogenesis-dependent tumors.
                                                                                                                   Endostatin peptide comprising at least four endostatin amino acid residues are e.g. angiogenesis inhibitors for treating cancer and diabetic retinopathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 66; DB 4; Length 23; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ziche M;
                                                                                                                                                                                                                      Example 4; Page 124; 146pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB35584 standard; peptide; 39 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-APR-2000; 2000WO-EP003236
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(UYFI-) UNIV FIRENZE.
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                                                                   WPI; 2001-040937/05.
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                    Vuori K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       agents
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8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                  The invention describes a composition comprising endostatin and sucrose octasulfate. Also described are: a new endostatin protein, which is a copenant and specific inhibitor of angiogenesis and endothelial proliferation; molecular probes for the ribonucleic acid and decoration; molecular probes for the ribonucleic acid and clean decer and measure endostatin protein serving as and calls; various forms of recombinant endostatin protein serving as and cells; various forms of recompounds; nucleic acid sequences comprising nucleocide codons that code for the endostatin; and te peptide for fragments; identification of receptors specific for endostatin; comprising nucleocide codons that code for the endostatin; comprising nucleocide codons that code for the endostatin in biological fragments; identification of receptors specific for endostatin; comprising nucleocides capable of releasing endostatin in biological disorders involving detection and measurement of endostatin in biological cliuids and tissues. The composition is useful for treating angiogenesis related diseases including cancer, heemangioma, leuksemia, metastasis, telangiectasia, psoriasis, scleroderma, pyogenic granuloma, myocardial angiogenesis, nevescularis psoriasis, scleroderma, pyogenic granuloma, myocardial capacidis, nevescularis disbetic retinopathy, retrolental cibroplasia, arthritis, diabetic neovascularisation, macular cibroplasia, hematopoiesis, ovulation, pactor, fractures, keloids, vasculogenesis, hematopoiesis, ovulation, placer, fractures, keloids, cor birth control. This is the amino acid sequence of human endostatin N. Cor birth control. This is the amino acid sequence of human endostatin N. Cor birth control. This is the amino acid sequence of human endostatin N. Cor birth control.
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                                                                                                                                                                    Composition useful for treating angiogenesis related diseases e.g. cancer comprises endostatin and sucrose octasulfate.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Endostatin, antiangiogenic, angiogenesis, human, mouse, chicken, cancer, inflammation, angiogenesis-dependent disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Murine endostatin peptide fragment SEQ ID NO: 19
                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 3; 37pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB49806 standard; peptide; 23 AA.
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Matches 13; Conservative
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                                                                                                                     WPI; 2004-374910/35
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                  (YIMZ/) YIM Z.
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Query Match

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RESULT 9 AAB49806

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Gene clone of inhibitory factor for hyperplasia of inner blood vessel cells in human body's real tumor, and its use in anti-tumor blood vessel
                                                                                                                               Endostatin, murine, proliferation, blood vessel endothelium, regeneration, tumour; blood vessel; treatment; amplification.
                                                                                                                                                                                                  Location/Qualifiers
                      AAM49504 standard; protein; 183 AA.
                                                                                                                                                                                                                               /label= Ser, Phe
                                                                                                                                                                                                                                                                                                                                          97CN-00107112.
                                                                                                                                                                                                                                                                                                               97CN-00107112.
                                                                              07-MAY-2002 (first entry)
                                                                                                        Mouse endostatin protein.
                                                                                                                                                                                                                                                                                                                                                                                                Xu L;
                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-106746/15.
                                                                                                                                                                                                                  Misc-difference 18
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                                                                                                                                                                                                                                                                                                                                                                     (xugg/) xu g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               regeneration.
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                                                   AAM49504;
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                                                                                                                                                                                                                                                                                  Mouse; endostatin; antitumour; cytostatic; antiarthritic; antipsoriatic; antidiabetic; ophthalmological; gene therapy; angiogenic inhibitor; adenoviral vector; diabetic retinopathy; cardiovascular disease; arthritis; psoriasis; cerebral oedema; intravascular coagulopathy; lymphoma; leukaemia; sig-mEndo; fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Adenoviral vector for treating tumors and disorders associated with angiogenesis, such as cancer, arthritis, and psoriasis, comprises a DNA sequence encoding an angiogenic inhibitor, particularly endostatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                    Gaps
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                      Score 66; DB 4; Length 39;
Pred. No. 0.00012;
Mismatches 0; Indels
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                                                                                                                                                                                                                                                           Murine sig-mEndo fusion protein N-terminal sequence.
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           100.0%; Scor.
100.0%; Pred. No. v..
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(NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
                                                                                                                                                                            AAB71931 standard; protein; 42 AA.
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                                                                                                                                                                                                                                (first entry)
                                                                                               1 OPVLHLVALNTPL 13
                                                    13; Conservative
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Matches 13; Conser
                                      Best Local Similarity
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Sequence 39
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                                    This invention describes a novel preparation which inhibits the proliferation of blood vessel endothelium and prevents the regeneration estivity of tumour blood vessels. The preparation can also be used as a biological preparation in the treatment of tumours. This sequence represents the murine endostatin protein described in the invention
                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                5; Length 183;
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                                                                                                                                                                                                                                           100.0%; Score 66; DB 5; I
100.0%; Pred. No. 0.00071;
ive 0; Mismatches 0;
Disclosure; Page 4 (Disclosure); 6pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY18409 standard; protein; 184 AA.
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Matches 13; Conservative
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30 QPVLHLVALNTPL 42

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1 OPVLHLVALNTPL 13

(BETH-) BETH ISRAEL DEACONESS MEDICAL CENT.

WPI; 1999-385604/32. N-PSDB; AAX79949

Sukhatme VP;

97US-0067888P. 98US-0082663P. 98US-0108536P.

22-APR-1998;

98WO-US026057

08-DEC-1998; 08-DEC-1997; 16-NOV-1998;

WO9929855-A1

Mus sp.

17-JUN-1999

Claim 31; Fig 2; 105pp; English

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This invention describes a novel viral gene therapy vector comprising a nucleic acid molecule encoding an anti-angiogenic polypeptide chosen from human or murine endostatin and angioagenesis-inhibiting fusions and fragments, where the viral vector is sufficiently attenuated for use in human gene therapy. The products of the invention have anti-angiogenic, cytostatic, anti-diabetic and ophthalmological activity. The vector is used in gene therapy for inhibiting tumour growth in humans harbouring a solid tumour. The vector expresses an anti-angiogenic polypeptide. An additional use comprises treatment of diabetic retinopathy, where the anti-angiogenic polypeptide inhibits angiogenesis in the vicinity of the retina. The vector is administered to cells exvivo and then administered to the patient
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Pred. No. 0.00071;
Mismatches 0; Indels
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                                                                                              (GENE-) GENETIX PHARM INC.
(MASI ) MASSACHUSETTS INST TECHNOLOGY.
                                                                                                                                                                      Bachelot T;
                                                                                                                                                                                                                                                                                       Anti-angiogenic gene therapy vectors.
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Matches 13, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This sequence is the mouse endostatin. The invention relates to a the mutant endostatin (EM), which has anti-angiogenic activity, and is designated EMI. Compositions comprising EMI or fusion proteins comprising CC EMI, are useful for treating diseases characterised by angiogenic EMI, are useful for treating diseases characterised by angiogenic cc EMI, are useful for treating diseases characterised by angiogenic cc rheumatoria arthritis, psoriasis, ocular angiogenesis, Osler-Webber Syndrome, myocardial angiogenesis, ocular angiogenesis, Osler-Webber CS yndrome, myocardial angiogenesis, scleroderma, hypertrophic scars, cc intestinal adhesions, atheroscierosis, scleroderma, hypertrophic scars, cc at scratch disease, Helicobacter pylori ulcers, dialysis graft vascular access stenosis, contraception and Obesity. In particular, the diseases CC treatable by EMI comprise cancer, especially renal cancer. The methods provide a means for introducing EMI into mammalian cells via gene therapy, for production of EMI via recombinant means, as well as CC recombinant production of the EMI protein. EMI performs as well as CC recombinant production of the EMI protein. EMI performs as well or better than whole endostatin. Use of EMI is advantageous for treatment of capted angles and may be able to better penetrate tissues
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mutant endostatin having anti-angiogenic activity
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AAY08689 standard; protein; 184 AA.

OPVLHLVALNTPL 19 1 OPVLHLVALNTPL 13

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Query Match
Best Local Similarity 100.
Matches 13; Conservative

Sequence 184 AA;

Murine endostatin protein fragment.

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AAY08689;

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03-JUN-1999

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Gaps

WPI; 2000-237616/20. N-PSDB; AAZ51299.

Novel fusion protein of angiostatin or endostatin and an immunoglobulin FC region, useful for treating conditions mediated by angiogenesis, such as rheumatoid arthritis, tumors and macular degeneration.

Example 5; Page 48-49; 68pp; English.

a signal sequence, an immunosibolin Foregion, and an anglogenesis inhibitor selected from angiostatin, endostatin, a plasminogen fragment having angiostatin activity, a collagen XVIII fragment having endostatin activity, or combinations of them. The fusion protein (immunofusin) is used to inhibit angiogenesis and to treat diseases or conditions mediated by angiogenesis. Conditions that may be treated include solid tumours, blood born tumours metastasis, benign tumours including mediated haemangiomas, acoustic neuromas, neurofibromas, trachomas and pyrogenic confidence of the fibroplasis, contain angiogenic diseases e.g. diabetic retinopathy, retinopathy of prematurity, macular degeneration, corneal graft rejection, neovascular glaucoma, retrolental confibroma, wound granulation, telangiectasia, haemophilac joints, plaque neovascularisation, telangiectasia, haemophilac joints, angiofibroma, wound granulation, and excessive or abnormal stimulation of endothelial cells, intestinal cells, atherosclerosis, sclercdermal and hypertrophic scars, i.e. keloid scars. The DNA constructs may be used in the construction of immunofusin murine immunoglobulin Fc fragment The patent discloses a DNA molecule encoding a fusion protein comprising

Sequence 184 AA;

Gaps ; 0 Query Match 100.0%; Score 66; DB 3; Length 184; Best Local Similarity 100.0%; Pred. No. 0.00071; Matches 13; Conservative 0; Mismatches 0; Indels

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ORGANISM: mammalian
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                   GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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Sequence 30, Application US/09385442

Batent No. 6200954

GENERAL INFORMATION:
APPLICANT: Kini, R. Manjunatha
TITLE OF INVENTION: Small Peptides Having Potent Anti-Angiogenic Activity
ITLE REFERENCE: 1781-170P
CURRENT APPLICATION NUMBER: US/09/385,442

CURRENT FILING DATE: 1999-08-30

BARLIER RILING DATE: 1999-09-04

NUMBER OF SEQ ID NOS: 50

SOFTWARE PETENTIN Ver. 2.0

SEQ ID NO 30

LENGTH: 13
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Patent No. (584205)
CENERAL INCORMATION*
CENERAL INCORMATION*
APPLICANT: Folkman, M. Judah
TITLE OF INVENTION: Therapeutic Antiangiogenic Compositions
TITLE OF INVENTION: and Methods
NUMBER OF SEQUENCES: 2
CORRESPONDENCES 2
CORRESPONDENCE ADDRESS.
ADDRESSEE: Jones & Askew, LLP
STREET: 191 Peachtree, 37th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 66; DB 3; Length 13; Best Local Similarity 100.0%; Pred. No. 5.8e-05; Matches 13; Conservative 0; Mismatches 0; Indels
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US-09-385-442-30
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100.0%; SCC-
100.0%; Pre
                                              TELEFAX: 404-818-3799
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
                                                                                                                                                                                                                              ANTI-SENSE: NO
FRAGMENT TYPE: internal
ORIGINAL SOURCE:
ORGANISM: Murine
ITSSUE TYPE: Collagen
US-09-349-429-1
                                                                                                          LENGTH: 20 amino acida
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 OPVLHLVALNTPL 13
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Best Local Similarity 100.
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Best Local Similarity 100.
Matches 13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 OPVLHLVALNTPL 13
                                                                                                                                                                 TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Georgia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Atlanta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT
; ORGANISM: murine
US-09-315-689-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE:
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Sequence 1, Application US/09349429

Setent No. 6174861

GENERAL INFORMATION:

APPLICANT: O'RE1111, Michael

APPLICANT: Folyman, M. Judah

ITILE OF INVENTION: Therapeutic Antiangiogenic Compositions

TITLE OF INVENTION: and Methods

NUMBER OF SEQUENCES: 2

CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 100.0%; Score 66; DB 2; Length 20; Best Local Similarity 100.0%; Pred. No. 9.3e-05; Matches 13; Conservative 0; Mismatches 0; Indels
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/740,168A
FILING DATE: 22-OCT-1996
CLASSIFICATION: 536
ATTONEY/AGENT INPORMATION:
NAME: WAZTEN, WIlliam L.
REGISTRATION NUMBER: 36,714
REFERENCE/DOCKET NUMBER: 05213-0223
TELEPHONE: 404-818-3700
TELEPAX: 404-818-3700
TELEPAX: 404-818-3700
TELEPAX: 104-818-3700
TELEPAX: 20 anino acids
LENGTH: 20 anino acids

LENGTH: 20 anino acids
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/349,429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Warren, William L.
REGISTRATION NUMBER: 36,714
REFERENCE/DOCKET NUMBER: 05213-0223
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Jones & Askew, LLP
STREET: 191 Peachtree, 37th Floor
CITY: Atlanta
STATE: Georgia
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/740,168
FILING DATE: 22-CCT-1996
ATTORNEY/AGENT INFORMATION:
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COMPUTER REAABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANTI-SENSE: NO FRAGMENT TYPE: internal ORIGINAL SOURCE: ORGANISM: Murine TISSUE TYPE: Collagen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 OPVLHLVALNTPL 13
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                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 20 amino acid
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-740-168A-1
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US-03-115-689-1

Sequence 1, Application US/09315689

Patent No. 6346510

GENERAL INFORMATION:

APPLICANT: FOLKman, Judah

APPLICANT: FOLKman, Therapeutic Antiangiogenic Endostatin Compositions

TITLE OF INVENTION: Therapeutic Antiangiogenic Endostatin Compositions

FILE REFRENCE: 05213-0229

CURRENT APPLICATION UNMER: US/09/315,689

CURRENT FILING DATE: 1999-05-20

NUMBER OF SEQ ID NOS: 6

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 1

LENGTH: 20
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Sequence 1, Application US/09174282

Sequence 1, Application US/09174282

Patent No. 654758

GREERAL INFORMATION:

APPLICANT: O'Reilly, Michael

APPLICANT: Polkman, M. Judah

TITLE OF INVENTION: and Methods

TITLE OF INVENTION: and Methods

NUMBER OF SEQUENCES: 2

CORRESPONDENCE ADDRESS: 2

CORRESPONDENCE ADDRESS: 3

STREET: 191 Peachtree, 37th Floor
100.0%; Score 66; DB 3; Length 20; 100.0%; Pred. No. 9.3e-05; cive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA ZIP: 30303 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
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Sequence 1, Application US/09174381;
Patent No. 6746865
GENERAL INFORMATION:
APPLICANT: O'Reilly, Michael
FOLKman, M. Judah
TITLE OF INVENTION: Therapeutic Antiangiogenic Compositions
and Methods
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/174,381
FILING DATE: 16-Oct-1998
CLASSIFICATION: CUNKNOWN>
PRIOR APPLICATION: CUNKNOWN>
PRIOR APPLICATION: WARDER: US 08/740,168
ATPORNEY/AGENT INFORMATION:
NAME: WARTEN, William L.
REGISTRATION NUMBER: 36,714
REPRENCE/DOCKET NUMBER: 36,714
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 404-818-3799
                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
100.0%; Score 66; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.3e-05;
Matches 13; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS ASKEW, LLP
ADDRESSE: Jones & ASKEW, LLP
STREET: 191 Peachtree, 37th Floor
CITY: Atlanta
STATE: Georgia
    05213-0223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 30303
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                     TELECOMMUNICATION INFORMATION:
TELEPHONE: 404-818-3700
TELEFAX: 404-818-3709
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
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SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
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STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                       MOLECULE TYPE: protein
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: internal
ORIGINAL SOURCE:
CRGANLSM: Murine
TISSUE TYPE: Collagen
US-09-154-302-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7 OPVLHLVALNTPL 19
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ANTI-SENSE: NO
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APPLICANT: O'Reilly, Michael
TITLE OF INVENTION: and Methods
NUMBER OF SEQUENCES:
CORRESPONDENCE ASKew, LLP
STREET: 191 Peachtree, 37th Floor
CITY: Atlanta
STATE: Georgia
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.0%; Score 66; DB 4; Length 20; Best Local Similarity 100.0%; Pred. No. 9.3e-05; Matches 13; Conservative 0; Mismatches 0; Indels
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ZIP: 30303
MEDIUM TYPE: Floppy disk
COMPUTER: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/154,302
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/174,282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/740,168
FILING DATE: 22-CT-1996
ATTORNEY/AGENT INFORMATION:
NAME: Warren, William L.
                                                                                                                                                                                                                                                      NAME: Warren, William L.
REGISTRATION NUMBER: 36,714
REFERNCE/DOCKET NUMBER: 05213-0223
TELECOMMUNICATION:
TELEPHONE: 404-818-3700
                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/740,168
FILING DATE: 22-0CT-1996
ATTORNEY/AGENT INFORMATION:
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Patent No. 6630448
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REGISTRATION NUMBER: 36,714
                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 404-618-3799
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 QPVLHLVALNTPL 13
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TISSUE TYPE: Collagen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein HYPOTHETICAL: NO
                                                                                                                 FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANTI-SENSE: NO FRAGMENT TYPE: 3 ORIGINAL SOURCE:
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US-09-154-302-1
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amino acid
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Matches 13; Conser
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                                                                                                                                                                                                                                                  ADDRESSEE:
                                            US-08-985-526-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
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US-09-561-500-13
                                                                                                                                                                                                                                                                                                                                   COUNTRY:
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Patent No. 6803211
GENERAL INCORMATION:
GENERAL INCORMATION:
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND TREATING DISORDERS
TITLE OF INVENTION: INVOLVING ANGIOGENESIS
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND TREATING DISORDERS
TITLE OF INVENTION: 133.00234/PC10790A
CURRENT APPLICATION NUMBER: US/09/938,391A
CURRENT FILING DATE: 2001-08-24
PRIOR FILING DATE: 2000-08-25
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PatentIn version 3.2
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                                                                                                                                                                                                                                                                                                                                                               Sequence 1, Application US/09405499;
Patent No. 6764995;
GENERAL INPORMATION:
APPLICANT: O'Reilly, Michael
APPLICANT: Folkman, M. Judah
TITLE OF INVENTION: Endostatin Protein and Fragments Thereof
FILE REPERDER. 05.213-0640;
CURRENT APPLICATION NUMBER. US/09/405,499;
CURRENT FILING DATE: 1999-09-23;
NUMBER OF SEQ ID NOS: 3
SOFTWARE: Patentin Ver. 2.0;
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%; Score 66; DB 4; Length 184; Best Local Similarity 100.0%; Pred. No. 0.001; Matches 13; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 66; DB 4; Length 20; 100.0%; Pred. No. 9.3e-05;
                                                                                                                                             Length 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                         Query Match 100.0%; Score 66; DB 4; Best Local Similarity 100.0%; Pred. No. 9.3e-05; Matches 13; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                      ORGANISM: Murine
TISSUE TYPE: Collagen
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
FRAGMENT TYPE: internal ORIGINAL SOURCE:
                                                                                                                                                                                                                                                    OPVLHLVALNTPL 19
                                                                                                                                                                                                                            1 QPVLHLVALNTPL 13
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Matches 13, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Murinae gen. sp
US-09-405-499-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-938-391A-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-938-391A-13
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LENGTH: 184
TYPE: PRT
                                                                                                    US-09-174-381-1
                                                                                                                                                                                                                                                                                                                                                  .09-405-499-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
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QPVLHLVALNTPL 19

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Sequence 13, Application US/09561500

Sequence 13, Application US/09561500

Sequence 13, Application US/09561500

GENERAL INFORMATION:

APPLICANT: Philip E. Thorpe

TITLE OF INVENTION: ANTIBODY COMPOSITIONS FOR SELECTIVELY INHIBITING VEGF

TITLE REPERENCE: 4001.002500

CURRENT APPLICATION NUMBER: US/09/561,500

CURRENT FILING DATE: 2000-04-28

PRIOR APPLICATION NUMBER: 60/131,432

PRIOR APPLICATION NUMBER: 60/131,432

PRIOR APPLICATION NUMBER: 2000-04-28

NUMBER OF SEQ ID NOS: 44

SEQ ID NO 13

LENGTH: 191

LENGTH: 191
Sequence 36, Application US/08985526
Patent No. 6080728
GENERAL INFORMATION:
APPLICANT: Mixeon, James A
TITLE OF INVENTION: CARRIER: DNA COMPLEXES CONTAINING DNA
TITLE OF INVENTION: THERAPY
TITLE OF INVENTION: THERAPY
TITLE OF INVENTION: THERAPY
NUMBER OF SEQUENCES: 43
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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; OTHER INFORMATION: Description of Artificial Sequence: SYNTHETIC
US-09-561-500-13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/985,526
FILING DATE:
                                                                                                                                                                                                                                          E: Connolly, Bove, Lodge, & Hutz
1220 Market Street, P.O. Box 2207
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/608,845
FILING DATE: 16-ULL-1996
ATTORNEY/AGENT INFORWATION:
NAME: MCMORTOW JT., RODERT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (302) 658-9141
                                                                                                                                                                                                                                                                                                                                                                   ZIP: 19899
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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ORGANISM: Artificial Sequence
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INFORMATION FOR SEQ ID NO:
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Sequence 13.4 Application US/09561499

Sequence 13.4 Application US/09561499

Patent No. 6524583

GENERAL INFORMATION:
APPLICANT: Philip E. Thorpe

APPLICANT: Philip E. Thorpe

APPLICANT: Rolf A Brekken

TITLE OF INVENTION:
FILE REPERENCE: 4001.005582

CURRENT APPLICATION NUMBER: US/09/561,499

CURRENT APPLICATION NUMBER: 60/131,432

PRIOR PILING DATE: 1999-04-28

NUMBER OF SEQ ID NOS: 44

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 13

LENGTH: 191
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: SYNTHETIC US-09-998-831-13
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ORGANISM: Artificial Sequence
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Matches 13; Conservative
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                        US-09-561-499-13
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Sequence 13, Application US/09561108
Sequence 13, Application US/09561108
Sequence 13, Application US/09561108
Sequence 13, Application US/09561108
GENERAL INFORMATION:
APPLICANT: Philip E. Thorpe
APPLICANT: Rolf A. Breaken
TITLE OF INVERTION: ANTIBODY CONJUGATE COMPOSITIONS FOR SELECTIVELY INHIBITING VEGF
FILE REFERENCE: 4001.002584
CURRENT APPLICATION NUMBER: US/09/561,108
CURRENT PILING DATE: 1099-04-28
PRIOR FILING DATE: 1999-04-28
NUMBER OF SEQ ID NOS: 44
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 13
LENGTH: 191
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Sequence 13, Application US/09561526

Batent No. 6416788

GENERAL INFORMATION:
APPLICANT: Philip E. Thorpe

APPLICANT: Rolf A. Brekken
TITLE OF INVENTION: ANTIBODY CONJUGATE KITS FOR SELECTIVELY INHIBITING VEGF
FILE REFERENCE: 4001.005586
CURRENT PFLING DATE: 2000-04-28
PRIOR PILLING DATE: 60/131,432
PRIOR PILLING DATE: 1999-04-28
NUMBER OF SEQ ID NOS: 44

SOFTAME: Patentin Ver. 2.0

LENGTH. 191
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; OTHER INFORMATION: Description of Artificial Sequence: SYNTHETIC US-09-561-526-13
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Query Match 100.0%; Score 66; DB 3; Length 191; Best Local Similarity 100.0%; Pred. No. 0.0011; Matches 13; Conservative 0; Mismatches 0; Indels
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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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OM protein - protein search, using sw model

March 10, 2005, 10:55:58; Search time 55.8684 Seconds (without alignments) 76.150 Million cell updates/sec Run on:

US-09-766-412-29 59

BLOSUM62 Gapop 10.0 , Gapext 0.5 1 SPHNSYIVLPI 11 Scoring table: Sequence:

Perfect score:

2105692 seqs, 386760381 residues Searched:

Total number of hits satisfying chosen parameters:

2105692

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

geneseqp1980s:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Description	Aab74255 Exemplary	Aab80861 Angiostat	Abg97538 Antiangio	Abu20188 Protein e	Aab49808 Murine en	Aab35587 Antiangio	Abp03487 Human ORF	Aam49504 Mouse end	Aay18409 Endostati	Aay08689 Murine en	Aay70258 Murine an	Aab49380 Murine en	Abg31793 Human end	Abu64290 Murine en	Aab28398 Murine en	Aau77950 Amino aci	Abj25793 Aspergill		_	Aab71930 Murine en	Abb79902 Mouse end	Adn00602 Murine en	Ado43904 Amino aci	Aay08691 Murine ge	Adh87724 Enterococ
ΩI	AAB74255	AAB80861	ABG97538	ABU20188	AAB49808	AAB35587	ABP03487	AAM49504	AAY18409	AAY08689	AAY70258	AAB49380	ABG31793	ABU64290	AAB28398	AAU77950	ABJ25793	ABJ26393	AAE02031	AAB71930	ABB79902	ADN00602	ADO43904	AAY08691	ADH87724
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& Query Match	100.0	100.0	100.0	67.8	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1		66.1	66.1	66.1	66.1
Score	59	59	59	40	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
Result No.	H	7	m	4	2	9	7	80	თ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

	Abul4632 Procein e Aay08692 Murine ge Aay25114 Mouse alp Aaw26328 Mouse alp		Abb61083 Drosophil Ad843599 Bacterial Ab083463 Pseudomon	Abu21359 Protein e Adb09837 Alloiococ Abu33803 Protein e	Abu34059 Protein e Abu34749 Protein e Abu34744 Protein e Aao17569 M catarrh
AAU33460 ABU44591 AAU35185	ABU14632 AAY08692 AAY25114 AAW26328	AAW92297 ABO84585 ABO84584	ABB61083 ADS43599 ABO83463	ABU21359 ADB09837 ABU33803	ABU34059 ABU36425 ABU34704 AAO17569
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6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	6 6 6 6 6 6	38.5 38	38 37 37	37 37 37
26 27 28	330	333 343 554	34 337 38	39 40 41	4 4 4 4 2 6 4 4 5 .

ALIGNMENTS

RESULT 1

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The present invention relates to anti-angiogenesis peptides from a portion of a selected from plasminogen, endostatin, VEGF or FLT-1. The invention is used to prevent or treat primary tumour growth or metastasis or undesired angiogenesis
                                                                                                       Anti-angiogenesis; plasminogen; VEGF; vascular endothelial growth factor; FLT-1; tumour; metastasis; cancer.
                                                                                                                                                                                                                                                                                                                                   Peptides comprising a portion of a protein selected from plasminogen, endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating primary tumor growth.
                                                                                   Exemplary anti-angiogenic peptide #29.
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                                                                                                                                                                                                                                                                                                                                                                                        Claim 7; Page 18; 34pp; English.
          AAB74255 standard; peptide; 11
                                                                                                                                                                                                                    01-SEP-2000; 2000WO-SG000131.
                                                                                                                                                                                                                                           99SG-00004310.
                                                                                                                                                                                                                                                                 (UYSI-) UNIV SINGAPORE NAT.
                                                          (first entry)
                                                                                                                                                                                                                                                                                                                WPI; 2001-257785/26.
                                                                                                                                                                                                                                                                                         Ge R, Kini RM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 11 AA;
                                                                                                                                                                    WO200118030-A2.
                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                            03-SEP-1999;
                                                        23-MAY-2001
                                                                                                                                                                                           15-MAR-2001.
                                  AAB74255;
AAB74255
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1 SPHNSYIVLPI 11

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Matches

Query Match 100.0%; Score 59; DB 4; Length 11; Best Local Similarity 100.0%; Pred. No. 0.00029; Matches 11; Conservative 0; Mismatches 0; Indels

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Gaps

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22-JAN-2001; 2001US-00766412.

US2002103129-A1.

01-AUG-2002

98US-0099313P.

04-SEP-1998; 30-AUG-1999; (GERR/) GE R. (KINI/) KINI R M.

WPI; 2002-749595/81.

Kini RM;

Ge R,

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence is a peptide which is effective in inhibiting undesirable anglogenesis. Anglogenesis is the process of new blood vessel formation from pre-existing vessels. Inappropriate anglogenesis is associated with various pathological conditions including solid tumour growth and metastasis. The present peptide can be used to to prevent tumour metastasis or inhibit the growth of a primary tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Peptides having potent anti-angiogenic activity, useful for the treatment of tumors, comprise a portion of a FLT-1 protein.
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                                                                                                                                                                                          Cytostatic; angiogenesis inhibitor; tumour metastasis; tumour growth.
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                                                                       AAB80861 standard; peptide; 11 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABG97538 standard; peptide; 11 AA.
                                                                                                                                                                Angiostatin-derived peptide #18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antiangiogenic peptide, Endo-1.
                                                                                                                                                                                                                                                                                                               99US-00385442
                                                                                                                                                                                                                                                                                                                                            98US-0099313P
                                                                                                                                                                                                                                                                                                                                                                       (UYSI-) UNIV SINGAPORE NAT
                                                                                                                                 29-MAY-2001 (first entry)
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Best Local Similarity 100.
Matches 11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                      Kini RM;
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                                                                                                                                                                                                                                                     US6200954-B1
                                                                                                                                                                                                                                                                                                                                            04-SEP-1998;
                                                                                                                                                                                                                        Unidentified
                                                                                                                                                                                                                                                                                                               30-AUG-1999;
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                                                                                                                                                                                                                                                                                   13-MAR-2001
                                                                                                     AAB80861;
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The invention discloses a peptide comprising a portion of a protein e.g. plasminogen, endostatin (Endo-1-4), vascular endothelial growth factor (VEGP), FLT-1 or kinase insert domain containing receptor/FLK-1. These peptides are able to act as potent angiogenic inhibitors (Angio-1-5) inhibiting endothelial cell proliferation and retarding tumour growth. CC Angiogenesis is the process of new blood vessel formation from precessive is the process of new blood vessel formation from precessing the same proving endothelial cell proliferation, migration and assembly into tubule structures. It plays an important role in normal physiological functions such as embryonic development and wound healing. Inappropriate angiogenesis is also associated with various pathological conditions including tumour growth and metastasis, rheumatoid arthritis and psoriasis Anticancer therapy by inhibiting tumour angiogenesis is called antiangiogenic therapy by inhibiting tumour angiogenesis is that functions through two high affinity tyrosine kinase receptors, FLT-1 and FLK-1 (not defined). Protein-protein interactions are crucial to many physiological and pharmacological processes and the peptides disclosed interactions. The sequences presented in ABG97510-ABG97559 are examples of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
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                                                                                                                                                                                                                                                                                                                           portion of a protein e.g. plasminogen, endostatin, and potent antiangiogenic activity and endothelial cell proliferation inhibition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                          Novel peptide for preventing/treating undesired angiogenesis, has
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                Claim 9; Page 9; 24pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-JUN-2003 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 11 AA;
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                                                                                                                                                                                                                                                                                                                                                            activity.
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Wang Wall

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the modulation of anglogenesis. This is useful in the treatment of cancers, inflammation, rheumatoid arthritis, chronic articular rheumatism, psoriasis, disorders associated with inopportune invasion of vessels such as diabetic retinopathy, neovascular glaucoma, retinopathy of prematurity, macular degeneration, corneal graft rejection, retrolental fibroplasia, rubeosis, capillary proliferation in atheroselerotic plaques and osteoporosis. Other anglogenesis-dependent diseases include Osle-Webber syndrome, myocardial anglogenesis, plaque neovasculisation, telangiectasia, haemophilac joints and wound granulation. In addition, the peptides can be used as birth control
                                                                          Endostatin; antiangiogenic; angiogenesis; human; mouse; chicken; cancer; inflammation; angiogenesis-dependent disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention provides endostatin peptides which can be used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Endostatin peptide comprising at least four endostatin amino acid residues are e.g. angiogenesis inhibitors for treating cancer and diabetic retinopathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 39; DB 4; Length 48; Pred. No. 9.2; 0; Mismatches 2; Indels
                           Murine endostatin peptide fragment SEQ ID NO: 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 10; Page 124-125; 146pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antiangiogenic pentacontapeptide IV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAB35587 standard; peptide; 50 AA.
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                                                                                                                                                                                                                                                                                                                                                                   99US-0132907P.
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81.8%;
                                                                                                                                                                                                                                                                                                                 02-MAY-2000; 2000WO-US012063.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BURN-) BURNHAM INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   33 SCHNSYIVLCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-040937/05
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                                                                                                                                                                                                           WO200067771-A1.
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                                                                                                                                                                                                                                                                                                                                                                     06-MAY-1999;
14-JUL-1999;
                                                                                                                                                       Mus musculus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vuori K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        agents
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention features to an isolated mucieic acid comprising any one or the fall antisense sequences given in the specification where expression of the nucleic acid inhibites proliferation of a cell. Also included are:

(1) a vector comprising a promoter operably linked to the nucleic acid encoding a polypeptide whose expression is inhibited by the antisense contisense nucleic acid; (2) a host cell containing the vector; (3) an isolated contisense nucleic acid; (4) an antibody capable of specifically binding the polypeptide or its fragment whose expression is inhibited by the contisense nucleic acid; (4) an antibody capable of specifically binding the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular proliferation or the activity of a gene in an operon required for proliferation, (7) identifying a compound that influences the activity of the gene product or that has an activity against a biological pathway or a gene or proliferation, or that inhibits cellular proliferation; (8) identifying a gene required for cellular proliferation of an organism acts; (9) manufacturing an antibiotic; (10) profiling a compound activity; (11) a culture comprising strains in which the extent or organism acts; (9) manufacturing an antibiotic; (10) profiling a compound activity; (11) a culture comprising strains in which the extent or product is overexpressed or underexpressed; (12) determining the extent or product is overexpressed or underexpressed; (12) determining the extent or strains; or (13) identifying the target of a compound that inhibits the coult or collection of a creaming proteins or screening for homologous nucleic acids are useful for electivity; or encounted and inhibits made activity and activity acceptance or delicate molecules for rational acceptance or accept
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense nucleic acids, useful for identifying proteins or screening for homologous nucleic acids required for cellular proliferation to isolate candidate molecules for rational drug discovery programs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                drug discovery programs, or for screening homologous nucleic acids required for proliferation in cells other than S. aureus, S. typhimurium, K. pneumoniae or P. aeruginosa. The present sequence is encoded by one of the target prokaryotic essential genes. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at fig. wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               one of
                                                                                                                                                                                                                                                                                      Zyskind JW;
Xu HH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to an isolated nucleic acid comprising any
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
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                                                                                                                                                                                                                                                                                      Ohlsen KL,
Forsyth RA,
                                                                                                                                                                                                                                                                                      Haselbeck R,
Yamamoto R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 25; SEQ ID NO 48112; 1766pp; English.
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                                                                                                                                                                                                                                                                                   Malone C,
Carr GJ,
                                                                  21-MAR-2001; 2001US-00815242.
06-SEP-2001; 2001US-0094893.
25-OCT-2001; 2001US-0342923P.
08-FEB-2002; 2002US-0372851.
06-MAR-2002; 2002US-0362699P.
                21-MAR-2002; 2002WO-US009107
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                                                                                                                                                                                                                               (ELIT-) ELITRA PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 63.
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                                                                                                                                                                                                                                                                                Zamudio C,
Trawick JD,
                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-029926/02.
N-PSDB; ACA24058.
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AAB49808;

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RESULT 5 AAB49808

Query Match

Best Loca Matches

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Gaps

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The present invention describes substantially purified human proteins (referred to as open reading frame, ORFX, where X is 1-11491 (see Table 1 con the specification). ABN15762 to ABN12782 encode the human ORFX proteins given in ABP0010 to ABP11500. ORFX proteins are useful for treating or preventing a pathology associated with an ORFX-associated disorder in humans, and in the manufacture of a medicament for treating a squances can be used in gene therapy. ORFX sequences can be used in gene therapy. ORFX sequences can be used in the squances can be used in gene therapy. ORFX sequences can be used in the creatment of cancer, hyperpooliferative disorders, cirrhosis of liver, psoriasis, benign tumours, keloid, degenerative disorders, paemorrhage, osteoarthritis, neurodegenerative disorders, disorders related to organ cransplantation, cardiovascular diseases, diabetes mellitus, systemic lupus erythematosus, hypertension, hypothyroidism, cholesterol ester storage disease, various immune deficiencies and disorders, infectious diseases, autoimmune thyroiditis, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. ORFX proteins are also cardinformune disorders, or periodontal disease, and for gut consequence degeneration and treatment of lung or liver fibrosis, bone degeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues and conditions resulting from systemic cytokine damage. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic form at directly from WIPO at ftp.wipo.int/pub/published_pot_egeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gene clone of inhibitory factor for hyperplasia of inner blood vessel cells in human body's real tumor, and its use in anti-tumor blood vessel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Endostatin; murine; proliferation; blood vessel endothelium; regeneration; tumour; blood vessel; treatment; amplification.
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11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 39;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     66.1%;
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Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mouse endostatin protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            regeneration.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; open reading frame; ORFX; gene therapy; cancer; cirrhosis; hyperproliferative disorder; psoriasis; benign tumour; haemorrhage; degenerative disorder; osteoarthritis; neurodegenerative disorder; cardiovascular disease; diabetes mellitus; systemic lupus erythematosus; hypertension; hypothyroidism; cholesterol ester storage disease; immune deficiency; immune disorder; infectious disease; autoimmune disorder; rheumatoid arthritis; autoimmune thyroiditis; myasthenia gravis.
                                                                                                                                                                                                                                                                                                             The present invention describes a number of peptides derived from endostatin which exhibit antiangiogenic activity. These may be used in the treatment of cancer. The present sequence is one of the peptides of the invention
                                                                                                                                                                                                          Polypeptides derived from endostatin exhibiting antiangiogenic activity useful for treatment of angiogenesis-dependent tumors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel human polypeptides and polynuclectides useful for diagnosing, preventing and treating cardiovascular disease, neurodegenerative, hyperproliferative disorders and autoimmune disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 39; DB 4; Length 50;
Pred. No. 9.6;
0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human ORFX protein sequence SEQ ID NO:6956.
                                                                                                                           Ξ
                                                                                                                           Ziche
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABP03487 standard; protein; 58 AA.
                                                                                                                                                                                                                                                                              Claim 5; Page 18; 28pp; English.
                    99IT-MI000777.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           66.1%;
81.8%;
                                                                                                                              Francescato P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
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Best Local Similarity 81.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002-106308/14.
                                                                                 UYFI-) UNIV FIRENZE
                                                                                                                                                                    WPI; 2001-007005/01.
                                                          (UYMI-) UNIV MILANO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; ABN19239
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 50 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200192523-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                  15-APR-1999;
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                                                                                                                         Chillemi F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-DEC-2001
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RESULT 7 ABP03487

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Gaps

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Length 58; 1; Indels

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than whole endostatin. Use of EM1 is advantageous for treatment of angiogenic diseases in that increasingly smaller peptides are more on a weight basis, and may be able to better penetrate tissues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bachelot T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Anti-angiogenic gene therapy vectors.
                                                                                                                                                                                                                                                                                                                                     Murine endostatin protein fragment.
                                                                                                                                                                                                                                                  AAY08689 standard; protein; 184 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Fig 6; 83pp; English
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                                                                                       66.1%;
81.8%;
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81.8%;
                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Leboulch P, Pawliuk RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 81.8
                                                                                                                   9; Conservative
                                                                                                                                                                        164 SCHNSYIVICI 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          164 SCHNSYIVICI 174
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                                                                                                                                              1 SPHNSYIVLPI 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-357696/30.
                                                                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; AAX77715
                                                          Sequence 184 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 184 AA;
                                                                                                                                                                                                                                                                                                         10-AUG-1999
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Best Local S
Matches 9
                                                                                                                                                                                                                                                                              AAY08689;
                                                                                       Query Match
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                                                                                                                   Matches
                                                                                                                                                                                                                     RESULT 10
AAY08689
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       activity, such as anogonesis-dependent cancers, benign tumours, the manacolar and tumours, are unfaintied as anogonesis-dependent cancers, benign tumours, themmatoid arthritis, psoriasis, ocular anogonesis, Oaler-Webber Syndrome, myocardial angiogenesis, plaque neovascularisation, telangiectasia, haemophiliac joints, angiofibroma, wound granulation, intestinal adhesions, atherosclerosis, scleroderma, hypertrophic scars, cat scratch disease, Helicobacter pylori ulcers, dialysis graft vascular access stenosis, contraception and obesity. In particular, the diseases treatable by EMI comprise cancer, especially renal cancer. The methods provide a means for introducing EMI into mammalian cells via gene therapy, for production of EMI via recombinant means, as well as recombinant production of the EMI protein. EMI performs as well or better
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This sequence is the mouse endostatin. The invention relates to a the mutant endostatin (EM), which has anti-angiogenic activity, and is designated EM1. Compositions comprising EM1 or fusion proteins comprising EM1, are useful for treating diseases characterised by angiogenic
                                                                                                                                                                                                                                                                                                                                                                                                                         EM1; anti-angiogenic peptide; endostatin; angiogenesis-dependent cancer; benign tumour; rheumatoid arthritis; psoriasis; ocular angiogenesis; osler-Webber Syndrome; mycardial angiogenesis; angiofibroma; cancer; plaque neovascularisation; telangiectais; atherosclerosis; scleroderma; dialysis graft vascular access stenosis; renal cancer; therapy.
                           This invention describes a novel preparation which inhibits the proliferation of blood vessel endothelium and prevents the regeneration activity of tumour blood vessels. The preparation can also be used as a biological preparation in the treatment of tumours. This sequence represents the murine endostatin protein described in the invention
                                                                                                                                                                           Gaps
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                                                                                                                                              DB 5; Length 183;
                                                                                                                                                                          Indels
                                                                                                                                                                          2;
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 Disclosure; Page 4 (Disclosure); 6pp; Chinese.
                                                                                                                                             Score 39; DB 5
Pred. No. 41;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BETH-) BETH ISRAEL DEACONESS MEDICAL CENT.
                                                                                                                                                                                                                                                                                                        AAY18409 standard; protein; 184 AA.
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98US-0082663P.
98US-0108536P.
                                                                                                                                           Query Match 66.1%;
Best Local Similarity 81.8%;
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-US026057
                                                                                                                                                                                                                                                                                                                                                                                              Endostatin protein sequence.
                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                164 SCHNSYIVLCI 174
                                                                                                                                                                                                      1 SPHNSYIVLPI 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-385604/32.
N-PSDB; AAX79949.
                                                                                                                   Sequence 183 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9929855-A1.
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16-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus sp.
                                                                                                                                                                                                                                                                           RESULT 9
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more potent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Plasminogen, murine; angiostatin, endostatin; gene therapy; vector; anti-angiogenic; attenuation; cytostatic; anti-diabetic; ophthalmology; tumour growth; solid tumour; diabetic retinopathy; retina.
                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                       DB 2;
                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                       Score 39;
Pred. No. 4
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Pred. No. '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GENE-) GENETIX PHARM INC.
(MASI ) MASSACHUSETTS INST TECHNOLOGY.
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AAB49380 standard; protein; 184 AA.

RESULT 12

AAB49380

(first entry)

02-MAR-2001

AAB49380;

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The patent discloses a DNA molecule encoding a fusion protein comprising a signal sequence, an immunoglobulin Fc region, and an angiogenesis influitor selected from angiostatin, endostatin, a plasminogen fragment having angiostatin activity, a collagen XVIII fragment having endostatin activity, a collagen XVIII fragment having endostatin activity, or combinations of them. The fusion protein (immunofusin) is used to inhibit angiogenesis and to treat diseases or conditions mediated by angiogenesis. Conditions that may be treated include solid tumours, blood born tumours, tumour metastasis, benign tumours including haemangiomas, acoustic neuromas, neurofibromas, trachomas and pyrogenic panniomas, rheumatoid arthritis, psoriasis, orollar angiogenic diseases e.g. diabetic retinopathy, retinopathy of prematurity, macular degeneration, corneal graft rejection, neovascular glaucoma, retrolental fibroplasia, rubeosis and Osler-Webber syndrome; myocardial angiogenesis, plaque neovascularisation, telangiectasia, haemophiliac joints, angiofibroma, wound granulation, and excessive or abnormal stimulation of endothelial cells, intestinal cells, atherosclerosis, sclerodermal and hypertrophic scars, i.e. keloid scars, the DNA constructs may be used in the construction of immunofusin murine immunoglobulin Fc fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel fusion protein of angiostatin or endostatin and an immunoglobulin FC region, useful for treating conditions mediated by angiogenesis, such as rheumatoid arthritis, tumors and macular degeneration.
                                                                                                                                                                                                Murine, immunoglobulin Fc fragment, endostatin, immunofusin, angiogenesis; inhibitor; cytostatic; antitheumatoid; antiarthritic; antidabetic; ophthalmological, immunosuppressant; vasotropic; vulnerary; treatment, antiarteriosclerosis; tumour; metastasis; atherosclerosis; psoriasis; rheumatoid arthritis; collar angiogenic disease; diabetic retinopathy; macular degeneration; myocardial angiogenesis; plaque neovascularisation; telangiectasia; wound granulation; keloid scar; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 39; DB 3; Length 184;
Pred. No. 42;
0; Mismatches 2; Indels
                                                                                                                                                                  Murine angiogenesis inhibitor, endostatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 5; Page 48-49; 68pp; English
                                       AAY70258 standard; protein; 184 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-US019329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-0097883P
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                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Li Y, Gillies SD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
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N-PSDB; AAZ51299.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 184 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200011033-A2
                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-AUG-1999;
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                                                                                                                       06-JUN-2000
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                                                                                AAY70258;
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RESULT 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention provides endostatin peptides which can be used in the modulation of angiogenesis. This is useful in the treatment of cancers, inflammation, rheumatoid arthritis, chronic articular rheumatism, psoriasis, disorders associated with inopportune invasion of prematurity, macular degeneration, corneal graft rejection, retrolental fibroplasia, rubosois, capillary proliferation in atherosclerotic plaques and osteoporosis. Other angiogenesis-dependent diseases include osler-Webber syndrome, myccardial angiogenesis, plaque neovasculisation, telangiectasia, haemophiliac joints and wound granulation. In addition, the peptides can be used as birth control
                                                                                               Endostatin; antiangiogenic; angiogenesis; human; mouse; chicken; cancer; inflammation; angiogenesis-dependent disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                  Endostatin peptide comprising at least four endostatin amino acid residues are e.g. angiogenesis inhibitors for treating cancer and diabetic retinopathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 39; DB 4; Length 184;
Pred. No. 42;
0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Fig 1; 146pp; English.
                                                                      Murine endostatin SEQ ID NO: 4.
                                                                                                                                                                                                                              02-MAY-2000; 2000WO-US012063.
                                                                                                                                                                                                                                                          99US-0132907P.
                                                                                                                                                                                                                                                                         99US-00353333
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81.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human endostatin polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-DEC-2002 (first entry)
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Matches 9; Conservative
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                                                                                                                                                                                                                                                                                                    (BURN-) BURNHAM INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          164 SCHNSYIVLCI
                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-040937/05.
                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; AAC88290.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 184 AA;
                                                                                                                                                                       WO200067771-A1.
                                                                                                                                                                                                                                                         06-MAY-1999;
14-JUL-1999;
                                                                                                                                            Mus musculus.
                                                                                                                                                                                                  16-NOV-2000.
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The present invention relates to an adeno-associated viral (AAV) vector comprising a polynucleotide that comprises a nucleic acid segment that encodes a choroidal or ocular neovascularisation inhibitory polypeptide operably linked to a promoter that expresses the segment to produce the polypeptide in a selected mammalian host cell. Such a vector is useful for providing a choroidal or ocular neovascularisation inhibitory polypeptide to a mammal, for use in the therapy of ocular neovascularisation, age-related macular degeneration, retinal neovascularisation, age-related macular degeneration, visual impairment, ocular dystunction, loss of vision, retinopathy, or blindness in a human. The present sequence is a protein shown in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to anti-Vascular Endothelial Growth Factor (VEGF) antibodies that bind to the same epitope as the monoclonal antibody ATCC PTA 1595 and which significantly inhibit VEGF binding to
                                                      Novel adeno-associated viral vector comprising polynucleotide encoding pigment epithelium-derived factor, useful for treating choroidal neovascularization, blindness, loss of vision.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Immunogenic composition for the treatment and diagnosis of cancer comprises an anti-VEGF (vascular endothelial growth factor) antibody binding the same epitope as the monoclonal antibody ATCC PTA 1595.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Murine, endostatin, cytostatic, antiproliferative; vascular endothelial growth factor; VEGF; antibody; VEGF2 receptor; cancer; vascularised solid tumour.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 184;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 39; DB 7;
Pred. No. 42;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAB28398 standard; protein; 191
                                                                                                                                  Claim 14; Page 38; Opp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              66.1%;
81.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 SPHNSYIVLPI 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Brekken RA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       164 SCHNSYIVLCI
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N-PSDB; AAC67777.
WPI; 2003-779243/73.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Murine endostatin.
                  N-PSDB; AAL56259
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 184 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200064946-A2
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                                                                                                                                                                                                                                                                                                                                                              New peptide useful for the preparation of medicaments with antiangiogenic activity that may be used in treating tumors or metastases, comprises a sequence corresponding to fragments of human endostatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to peptide comprising 20-50 amino acids with sequences corresponding to the human endostatin polypeptide sequence, its salt or non-toxic derivative. The peptides are useful in the preparation of medicaments with antiangiogenic activity which may be useful in treating tumours or metastases. This sequence represents a human
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the VEGF receptor VEGFR2, without inhibiting VEGF binding to the VEGF receptor VEGFR1. The present sequence is murine endostatin. Endostatin may be conjugated onto the anti-VEGF antibodies of the present invention. The anti-VEGF antibodies of the present invention are useful for the treatment and diagnosis of cancer, especially vascularised solid tumours
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Sequence 191 AA;

ö Gaps ; Query Match 66.1%; Score 39; DB 3; Length 191; Best Local Similarity 81.8%; Pred. No. 43; Matches 9; Conservative 0; Mismatches 2; Indels

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        32
        41
        60.3
        795
        1
        PSCS_MOUSE
        Q92110 m delta 1-p

        33
        41
        60.3
        795
        2
        Q8BGM2
        Q8bgm2 mus musculu

        34
        41
        60.3
        1348
        2
        Q8FR36
        Q9FR36
        Q9FR36
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ALIGNMENTS

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DG OGENTA

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Name=Col15al;
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NON_TER
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Q61434;
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Matches
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1D 061434
AC 0614
DT 01-M
DT 0
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                                                                                                                                                                                                 Adachi J., Aizawa K., Akahira S., Akimura T., Arai A., Aono H.,
Adachi J., Aizawa K., Akahira S., Rukuda S., Fukunishi Y., Furuno M.,
Arakawa T., Bono H., Carninci P., Fukuda S., Fukunishi Y., Furuno M.,
A Hanagaki T., Hara A., Hayatsu N., Hiramoto K., Hiraoka T., Hori F.,
Imotani K., Ishii Y., Itoh M., Izawa M., Koya S., Kurihara C.,
A Kawai J., Kojima Y., Konno H., Kouda M., Koya S., Kurihara C.,
A Matsuyama T., Miyazaki A., Nishi K., Nomura K., Numazaki R., Ohno M.,
A Okazaki Y., Okido T., Owa C., Saito H., Saito R., Sakai C., Sakai K.,
Sano H., Saeaki D., Shibata K., Shibata Y., Shinagawa A., Shizaki T.,
A Sogabe Y., Suzuki H., Tagami M., Tagawa A., Takahashi F., Tanaka T.,
A Tejima Y., Toya T., Yamamura T., Yasunishi A., Yoshida K., Yoshino M.,
Muramatsu M., Hayashizaki Y.;
Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
Fujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watahiki M., Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J., Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y., Raki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y., sequencian integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer.";
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MGD; MGI:88451; Coll8a1.

MGD; MGI:08564; C:basement membrane; IDA.

GO; GO:0005615; C:extracellular space; TAS.

GO; GO:0001525; P:angiogenesis; IMP.

GO; GO:0001886; P:positive regulation of apoptosis; IDA.

GO; GO:001335; P:positive regulation of cell migration; IDA.

GO; GO:0008284; P:positive regulation of cell migration; IDA.

GO; GO:0008284; P:positive regulation of cell migration; IDA.

InterPro; IPR010515; Endostatin.
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01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Collagen type XVIII, alpha (I) chain (Fragment)
Name=coll8a1;
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Pfam; PF06482; Endostatin; 1.
Collagen.
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                                                                                                                                                                                    SEQUENCE FROM N.A.
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Q9WUW5
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Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus.
NCBI_TaxID=10116;
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Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Musinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=Sprague-Dawley;
STRAIN=Sprague-Dawley;
MEDLINE=20227226; PubMed=10766159;
MEDLINE=20227226; PubMed=10766159;
MEDLINE=20227226; PubMed=10766159;
Perletti G., Concari P., Giardini R., Marras E., Piccinini F.,
Polkman J., Chen L.;
"Antitumor activity of endostatin against carcinogen-induced rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
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                                                                                                Length 171;
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Abe N., Muragaki Y., Yoshioka H., Inoue H., Ninomiya Y.;
Submitted (SEP-193) to the EMBL/GenBank/DDBJ databases.
EMBL, D17545, BAA04483.1; -.
PIR; B56101; B56101.
1 1
171 171
171 AA; 18933 MW; 81BE2EE3FC2C8B72 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
11-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Collagen XVIII (Fragment).
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                             100.0%; Score 68; DB 2; I
100.0%; Pred. No. 0.00046;
tive 0; Mismatches 0;
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MGD, MGI:88449, Coll5al.
GO, GO:0005737, C:cytoplasm, IEA.
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InterPro; IPR010515; Endostatin.
Pfam; PF06482; Endostatin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      primary mammary tumors.";
Cancer Res. 60:1793-1796(2000).
EMBL; AF189709; AAF00975.1; -.
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Best Local Similarity 100....
Best Ar Conservative
                                                                                                                                                                                                     1 VPIVNLKDEVLSPS 14
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                                                                                                                                                                                                                                                  61 VPIVNLKDEVLSPS 74
                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus (Rat)
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                                                                                                                  Local Similarity
nes 14; Conserv
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InterPro; IPR010515; Endostatin.
                                                                                                                                          Collagen.
SEQUENCE
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Q6P1Y4
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SEQUENCE FROM N.A.

STAIN=C57BL/6; TISSUE=Brain;

RA

STRAIN=C37BL/6; TISSUE=Brain;

RA

STRAIN=CAPIL

SA

Altechul S.F., Zechler G.D.,

RA

STRAIN=CAPIL

SA

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Stableton M.J., Soares M.B., Bonadoo M.F., Casavant T.L., Scheetz T.E.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RACHARGS S., McGwan P.J., McKernan K.J., Maden R.D., Mullahy S.J.,

RACHARGS S., McTley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Richards S., Worley R.C., Skeychenko Y., Bouffard G.G.,

Milting M., Madan A., Young A.C., Sheychenko Y., Bouffard G.G.,

Richards A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

RAZPWINSK! M. I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

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"Generation and initial analysis of more than 15,000 full-length human
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus
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GO; GO:0005615; C:extracellular space; TAS.
GO; GO:0001525; P:angiogenesis; IMP.
GO; GO:0001525; P:angiogenesis; IMP.
GO; GO:001086; P:nositive regulation of apoptosis; IDA.
GO; GO:0002084; P:positive regulation of cell migration; IDA.
InterPro; IPR008161; Cig helix.
InterPro; IPR008161; Collagen.
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                                                                                                                                                                                                                                                    Score 68; DB 2; Length 1140;
Pred. No. 0.0036;
0; Mismatches 0; Indels (
                                                                                                                                                             Collagen.

NON TER 1 1 1 SEQUENCE 1140 AA; 115156 MW; 8B0C7E6862B3BDFE CRC64;
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Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Procollagen, type XVIII, alpha 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT; 1315 AA.
GO; GO:0006817; P:phosphate transport; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR008985; ConA_like_lec_gl
              InterPro; IPR008161; Clg helix.
InterPro; IPR008160; Collagen.
InterPro; IPR010515; Endostatin.
Pfam; PF01391; Collagen; B.
Pfam; PF06482; Endostatin; I.
ProDom; PD000007; Clg_helix; 3.
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STRAIN=C57BL/6; TISSUE=Brain;
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Best Local Similarity 10v...
Rest Local Similarity 10v...
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TISSUE-Embryo;

MEDLINE-2238257; PubMed=12477932; DOI=10.1073/pnas.242603899;

MEDLINE-2238257; PubMed=12477932; DOI=10.1073/pnas.242603899;

A Strausberg R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,

A Alschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Brownstein M.S., Goares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Brownstein M.J., Ubddin T.B., Toshiyuki S., Carninci P., Prange C.,

Brownstein M.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

Brownstein M.S., McKernan K.J., Malek J.A., Gunaratne P.H.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

A Villalon D.K., Muzny D.M., Sodercia B.J., Lu X., Gibbs R.A.,

Rabey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

Milting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

A Jones S.J., Marra M.A.; and Marra M.A.; and mouse cubik sequences "."

A mad mouse control and initial analysis of more than 15,000 full-length human man mouse control and initial analysis of more than 15,000 full-length human man man and mouse control man and 
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Submitted (JAN-2004) to the EMBL/GenBank/DDBJ databases.

EMBL; BC064817; AAH64817.1;
R GO; GO: 0005604; C: baseement membrane; .IDA.

GO; GO: 0005615; C: extracellular space; TAS.

GO; GO: 0001886; P: endothelial cell morphogenesis; IDA.

R GO; GO: 0001886; P: endothelial cell morphogenesis; IDA.

R GO; GO: 0001885; P: positive regulation of apoptosis; IDA.

R GO; GO: 0008284; P: positive regulation of cell migration; IDA.

R GO; GO: 0008284; P: positive regulation of cell proliferation; IDA.

R InterPro; IPR008161; Clg helix.

InterPro; IPR008165; Cona_like_lec_gl.

R InterPro; IPR00815; Endodetatin.

R InterPro; IPR00155; Endodetatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Name=ColiBal;
Mus musculus (Mouse).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 68; DB 2; Length 1315; 100.0%; Pred. No. 0.0042; ive 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                     1315 AA; 134245 MW; 15C862C1E385F03A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Procollagen, type XVIII, alpha 1.
                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Pred. nc.
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                                                           Pfam; PF01391; Collagen; 7.
Pfam; PF06488; Endogratin; 1.
Probom; PD000007; Clg helix; 2.
SMART; SM00210; TSPN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1200 VPIVNLKDEVLSPS 1213
IPRO03129; TSP_N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 VPIVNLKDEVLSPS 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=10090;
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U34609;
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EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oh S.P., Kamagata Y., Muragaki Y., Timmons S., Ooshima A., Olsen B.R.; "Isolation and sequencing of cDNAs for proteins with multiple domains of Gly-Xaa-Yaa repeats identify a distinct family of collagenous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. (ISOFORM 3).
STRAIN=BALB/c; TISSUE=Liver;
MEDLINE=94245707; PubMed=8188673;
Rehn M.V., Hintikks E., Pihhlajaniemi T.;
"Primary structure of the alpha 1 chain of mouse type XVIII collagen, partial structure of the corresponding gene, and comparison of the alpha 1 (XVIII) chain with its homologue, the alpha 1(XV) collagen
                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIINE=94240112; PubMed=8183894; Rehn M.V., Pihlajaniemi T.; Rahn M.V., Rahn M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. (ISOFORMS 1; 2 AND 3).
MEDLINE=96435922; PubMed=8838808; DOI=10.1006/geno.1996.0139;
Rehn M., Hintikka E., Pihlajaniemi T.;
"Characterization of the sequence gene for the alpha-1 chain of type XVIII collagen (COLIBAL) reveals that the three variant N-terminal polypeptide forms are transcribed from two widely separated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=95181468; PubMed=7876242; DOI=10.1074/jbc.270.9.4705;
                                                                                                                                                                                                            Length 1315;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 1-562 FROM N.A. (ISOFORMS 1 AND 3), AND TISSUE
                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                 B8215602ACE7AD1F CRC64;
                                                                                                                                                                                                      100.0%; Score 68; DB 2; Ld 100.0%; Pred. No. 0.0042; ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sci. U.S.A. 91:4234-4238(1994).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . Biol. Chem. 269:13929-13935(1994).
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and Drosophila frizzled proteins.";
J. Biol. Chem. 270:4705-4711(1995).
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                                                                                                                                              1315 AA; 134203 MW;
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Pfam; PF01391; Collagen; 7.
Pfam; PF06482; Endostatin; 1.
ProDom; PD000007; Clg_helix;
SMART; SM00210; TSPN; 1.
                                                                                                                                                                                                                                                                                                                                                                                    1200 VPIVNLKDEVLSPS 1213
                                                                                                                                                                                                                                                                                                                               1 VPIVNLKDEVLSPS 14
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                                                                                                                                                                                                      Query Match 100.
Best Local Similarity 100.
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (Mouse)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10090;
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                                                                                                               Collagen.
                                                                                                                                                     SEQUENCE
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isp-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Event=Alternative promoter;
Comment=2 isoforms, 1 (shown here) and 3, are produced by use of
                                                                                                                                                                                                                                                                                                                                 CHARACTERIZATION OF ENDOSTATIN, AND PARTIAL SEQUENCE.
MEDLINE=97160848; PubMed=9008168; DOI=10.1016/S0092-8674(00)81848-6;
O'Really M.S., Bochm T., Shing Y., Pukai N., Vasios G., Lane W.S.,
Flynn E., Birkhead J.R., Olsen B.R., Folkman J.;
"Endostatin: an endogenous inhibitor of angiogenesis and tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          X-RAY CRYSTALLOGRAPHY (1.5 ANGSTROMS) OF ENDOSTATIN.
MEDLINE-99169382; Pubmeda-9501087; DOI=10.1093/emboj/17.6.1656;
Hohenester E., Sasaki T., Olsen B.R., Timpl R.;
"Crystal structure of the anglogenesis inhibitor endostatin at 1.5-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -i-FUNCTION: Endostatin potently inhibits endothelial cell proliferation and angiogenesis. May inhibit angiogenesis by binding to the heparan sulfate proteoglycans involved in growth factor signaling.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -!- PTM: Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.
-!- SIMILARITY: Belongs to the fibril-associated collagens with interrupted helices (FACIT) family.
-!- SIMILARITY: Contains 1 frizzled (FZ) domain.
-!- SIMILARITY: Contains 1 TSP N-terminal (TSPN) domain.
                                                                                              SEQUENCE OF 1591-1774 FROM N.A.

MEDLINE=21217748; PubMed=11321448;
Jia S., Zhu F., Li H., He F., Xiu R.-J.;

"Anticancer treatment of endostatin gene therapy by targeting tumor neovasculature in C57/8L mice.";

Clin. Hemorheol. Microcirc. 23:251-257(2000).
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Isold=P39061-1; Sequence=VSB 000303;
Note=Produced by alternative splicing of isoform 1;
Name=3; Synonyms=Short, NC1-301;
Isold=P39061-2; Sequence=VSP 001157, VSP 001158;
TISSUE SPECIFICITY: Expressed in liver, kidney, lung, skeletal
muscle and testis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        alternative promoters;
Bvente-Alternative splicing; Named isoforms=3;
Name=1; Synonyms=NC1-764;
Isold=P39061-3; Sequence=Displayed;
proteing.";
Proc. Natl. Acad. Sci. U.S.A. 91:4229-4233(1994)
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AAC52901.1; JOINED
AAC52901.1; JOINED
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      resolution.";
EMBO J. 17:1656-1664(1998)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   growth.";
Cell 88:277-285(1997).
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EMBL; U34610; P
EMBL; U34611; P
EMBL; U34612; P
EMBL; U34612; P
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U34608;
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U34607;
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AAC52902.1;

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[1] -
SEQUENCE FROM N.A.
MEDLINE=21409408; PubMed=11517600;
Feng Y., Cui L.B., Liu C.X., Ma Q.J.;
Fing Y., Cui bect in vitro of purified endostatin expressed in Pichia
                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
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100.0%; Score 68; DB 1; Length 1774; 100.0%; Pred. No. 0.0059; ive 0; Mismatches 0; Indels
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                                                                 0; Indels
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
Feng Y., Wu Y., Zlu X., Liu C.X., Ma Q.J.;
Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AF416592; AAL37720.1;
HSSP; P39066; 1BNL.
PFam; PF06482; Endostatin; 1.
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Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
EMBL, APP282831, AMS2249.1;
HSSP, P39060, 1BNL.
InterPro, IPR010515; Endostatin.
InterPro; IPR00001; Kringle.
Pfam; PP06482; Endostatin; 1.
ProDom; PD000395; Kringle; 1.
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NON TER 1 1
SEQUENCE 187 AA; 20448 MW; 72B1047D85838CD3 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAR-2002 (TrEMBLrel. 20, Created)
01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Collaga XVIII (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OMR-2004 (TrEMBLrel. 26, Last annotation update)
Multi-functional protein MFP.
Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pastoris.";
Sheng Wu Gong Cheng Xue Bao 17:278-282(2001)
                                                                                                                                                                                                                                                                                                                                                                                         187 AA
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                                                                                                                                                                                 1659 VPIVNLKDEVLSPS 1672
                                                                                                                                         1 VPIVNLKDEVLSPS 14
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                                Best Local Similarity 100.
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
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SEQUENCE FROM N.A.
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SEQUENCE
   Query Match
                                                                                                                                                                                                                                                                                                         RESULT 8
08WXIS
10 01-WAR-2
DT 01-WAR-2
DT 01-WAR-2
DT 01-WAR-2
DE Collagen
CC Buckne Sap
CC Mammalia

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Q8NG19
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REMBL, 034600; AAC52903.1; JOINED.

REMBL, 034600; AAC52903.1; JOINED.

REMBL, 034610; AAC52903.1; JOINED.

REMBL, 034610; AAC52903.1; JOINED.

REMBL, 034610; AAC52903.1; JOINED.

REMBL, 034612; AAC52903.1; JOINED.

REMBL, 034613; AAC52179.1; -.

REMBL, 034613; AAC52179.1; -.

REMBL, 034613; AAC52179.1; -.

REMBL, 034613; COLIBAI.

COLIBACI.

REMBL, 034613; COLIBAI.

COLIBACI.

REMBL, 034613; COLIBAI.

COLIBACI.

REMBL, 034613; COLIBAI.

REMBL, 034613;
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Nonhelical region 1 (CCL1).

Triple-helical region 2 (NC2).

Triple-helical region 3 (NC3).

Triple-helical region 3 (NC3).

Triple-helical region 3 (CCL2).

Nonhelical region 4 (NC4).

Triple-helical region 5 (NC5).

Triple-helical region 6 (NC5).

Triple-helical region 6 (NC5).

Nonhelical region 6 (NC5).

Nonhelical region 6 (NC5).

Nonhelical region 6 (NC5).

Nonhelical region 7 (NC7).
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Nonhelical region 8 (NC8).
Triple-helical region 8 (COL8).
Nonhelical region 9 (NC9).
Triple-helical region 9 (COL9).
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Collagen alpha 1(XVIII) chain.
Endostatin.
TSP N-terminal.
                                                                                          L, U34613, AACS2902.1, JOINED.
L, U03714, AACS2902.1, JOINED.
L, U03715, AACS2902.1, JOINED.
L, U03715, AACS2903.1, -
L, U03716, AACS2903.1, -
L, U03716, AACS2903.1, JOINED.
L, U34609, AACS2903.1, JOINED.
L, U34609, AACS2903.1, JOINED.
L, U34610, AACS2903.1, JOINED.
L, U34611, AACS2903.1, JOINED.
L, U34612, AACS2903.1, JOINED.
L, U34613, AACS2903.1, JOINED.
L, U11636, A
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JOINED.
JOINED.
JOINED.
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SIGNAL 1
CHAIN 27 17
CHAIN 1591 177
DOWAIN 245 41
DOMAIN 365 41
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EMBL;
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EMBL;
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EMBL;
EMBL;
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NCBI_TaxID=9606;
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Matches
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MEDLINE=22980396; PubMed=14614989; DOI=10.1016/S0945-053X(03)00073-8; Blamman H., Shellman A., Rehn M., Autio-Harmalnen H., Pihlajaniemi T.; "Characterization of the human type XVIII collagen gene and proteclytic processing and tissue location of the variant containing a frizzled motif.";
                                                  Gaps
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01-0CT-2002 (TrEMBLrel. 22, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Similar to collagen, type XVIII, alpha 1 (Fragment).
Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
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    Length 261;
                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
TISSUE=Kidney;
Strausberg R.;
Submitted (JUL-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BC033715; AAH33715.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      816 AA; 82553 MW; 5D539B2946694F86 CRC64;
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05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Type XVIII collagen short variant.
      Score 59; DB 2;
Pred. No. 0.032;
                                                                                                                                                                                                                                     816 AA.
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                                             1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GO; GO:0005737; C:cytoplasm; IEA.
GO; GO:0006817; P:phosphate transport; IEA.
InterPro; IPR008161; Cig helix.
InterPro; IPR008160; Collagen.
InterPro; IPR008155; Endostatin.
Pfam; PF01391; Collagen; 5.
Pfam; PF0482; Endostatin; 1.
                                                                                                                                                                                                                                     PRT;
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EMBL; AY484967; AAR83298.1; JOINED.
EMBL; AY484969; AAR83298.1; JOINED.
EMBL; AY484970; AAR83298.1; JOINED.
EMBL; AY484971; AAR83298.1;
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    86.8%;
                                                                                                                 147 VPIVNLKDELLFPS 160
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                                                                                       1 VPIVNLKDEVLSPS 14
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Query Match
Best Local Similarity 85.7°
Matches 12; Conservative
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NON TER
SEQÜENCE
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Q8N4S4
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MEDLINE=20289799; PubMed=10830953; DOI=10.1038/35012518;
MEDLINE=20289799; PubMed=10830953; DOI=10.1038/35012518;
A Hattori M., Fujtyama A., Taylor T.D., Watanabe H., Yada T.,
A Park H.-S., Toyoda A., Ishii K., Totoki Y., Choi D.-K., Seeda E.,
A Ohki M., Takagi T., Sakaki Y., Taudien S., Blechschmidt K., Polley A.,
A Menzel U., Kumpf K., Ichmann S., Patterson D.,
A Reichwald K., Rump A., Schillhabel M., Schudy A., Zimmermann W.,
Rosenthal A., Kudoh J., Shibuya K., Kawasaki K., Asakawa S.,
A Roichman A., Saaki T., Nagamine K., Mitsuyama S., Antonarakis S.E.,
A Minoshima S., Shimizu N., Nordsiek G., Hornischer K., Brandt P.,
Scharfe M., Schoen O., Desazio A., Reichelt J., Kauer G., Blocker H.,
Ramser J., Beck A., Klages S., Hennig S., Rieselmann L., Dagand E.,
Wehrmeyer S., Borzym K., Gardiner K., Nizetic D., Francis F.,
Lehrach H., Reinhardt R., Yaspo M.-L.;
"The DNA sequence of human chromosome 21.";
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MEDILTE-98144096; PubMed-950336; DOI=10.1016/S0945-053X(98)90003-8; MEDILTE-98144096; PubMed-9503365; DOI=10.1016/S0945-053X(98)90003-8; Saarela J., Yllkarppa R., Rehn M., Purmonen S., Pihlajanlemi T.; "Complete primary structure of two variant forms of human type XVIII collagen and tissue-specific differences in the expression of the matrix Biol. 16:319-328(1998).
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MEDLINE-94245237; PubMed-8188291;
Oh S.P., Warman M.L., Seldin M.F., Cheng S., Knoll J.H., Timmons S., Olsen B.R.;
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[4]
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Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
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P39060; Q9UK38; Q9Y6Q7; Q9Y6Q8;
01-FEB-1995 (Rel. 31, Created)
29-MAR-2004 (Rel. 43, Last sequence update)
25-OCT-2004 (Rel. 45, Last annotation update)
Collagen alpha 1(XVIII) chain precursor [Contains: Endostatin]
Name=COL18A1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           86.8%; Score 59; DB 2; Length 1336;
85.7%; Pred. No. 0.19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1336 AA; 135522 MW; 1287BFAB2D5034C3 CRC64;
GO; GO:0005737; C:cytoplasm; IEA.
GO; GO:0005198; F:structural molecule activity; IEA.
GO; GO:0007155; P:cell adhesion; IEA.
GO; GO:0007155; P:cell adhesion; IEA.
InterPro; IPR008161; ClJ helix.
InterPro; IPR008160; Collagen.
InterPro; IPR00895; ConA like lec_gl.
InterPro; IPR010515; Endostatin.
Pfam; PF01312; CGlagen; 6.
Pfam; PF0482; Endostatin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Mismatches
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les 12; Conservative
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O-linked
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Pfam; PF02210; TSP N; 1.
Probom; PD000007; Člg helix; 1.
SMART; SMO0210; TSPN; 1.
3D-structure; Alternative splicing;
Extracellular matrix; Glycoprotein;
                    EMBL; L22548; AAA51864.1; -.
EMBL; AF184060; AAF01310.1; ALT INIT
PDB; IBNL; X-ray; A/B/C/D=1334-1511.
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SIGNAL 1 23 Potent
CHAIN 24 1516 Collag
  EMBL; AL163302; CAB90482.1; -.
                                                                                  GlycoSuiteDB; P39060; -.
Genew; HGNC:2195; COL18A1.
MIM; 120328; -.
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Pfam; PF06121; DUF959; 1.
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  Levent-Alternative splicing; Named isoforms=2;

Name=Long; Synonyms=NC-493;
Name=Long; Synonyms=NC-493;
Name=Long; Synonyms=NC-493;
Name=Short; Synonyms=NC1-303;
Name=Short; Sequence=VSP_001155, VSP_001156;
Name=Short; Sequence=VSP_001155, VSP_001156;
Name=Short; Sequence=VSP_001155, VSP_001156;
Name=Short; Sequence=VSP_001155, VSP_001156;
Name=Short; Sequence=NSP_001155, VSP_001156;
Name=Short; Sequence=NSP_001156, VSP_001156;
Name=Short; Short; Sequence=NSP_001156, Name
Name=Short; Short; Sequence=NSP_001156, Name
Name=Short; Short; S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VARIANTS LEU-49; ARG-111; ILE-841 AND ARG-886, AND CHARACTERIZATION OF VARIANT ASN-1437.

PubMed=14695535, DOI=10.1002/humu.10284;
Menzel O., Bekkeheien R.C.G., Reymond A., Fukai N., Boye E.,
Kosztolanyi G., Aftimos S., Deutsch S., Scott H.S., Olsen B.R.,
Antonarakis S.E., Guipponi M.;
"Knobloch syndrome: novel mutations in COL18A1, evidence for genetic heterogeneity, and a functionally impaired polymorphism in
                                                                                                                                                                                                                                                                                                                                      VARIANTS ILE-841 AND ASN-1437.

MEDLINE=2151818515; PubMed=11666364;
Iughetti P., Suzuki O., Godoi P.H., Alves V.A., Sertie A.L.,
Zorick T., Soares F., Camargo A.A., Moreira E.S., di Loreto C.,
Moreira-Filho C.A., Simpson A., Oliva G., Passos-Bueno M.R.;
TA Polymorphism in endostatin, an angiogenesis inhibitor, predisposes
for the development of prostatic adenocarcinoma.";
Cancer Res. 61:7375-7378(2001).
                                                                                                                                                                  MEDLINE=20400145; PubMed=10942434; DOI=10.1093/hmg/9.13.2051; SertLe A.L., Sossi V., Camargo A.A., Zatz M., Brahe C., Passos-Bueno M.R.; Brabeno M.R.; Collagen XVIII, containing an endogenous inhibitor of angiogenesis and tumor growth, plays a critical role in the maintenance of retinal Extracture and in neural tube closure."; Hum. Mol. Genet. 9:2051-2058(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Zhi Yong H., Biao L., Wei-Jie Z., Xiang-Fu W.,
                                                                                                        Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                  INVOLVEMENT IN KNOBLOCH SYNDROME.
SEQUENCE OF 1334-1516 FROM N.A.
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ALTERNATIVE PRODUCTS:
                    'ISSUE=Placenta;
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MIM; 267750; -
Octobrosses; C:collagen; TAS.
GO; GO:0005581; P:negative regulation of cell proliferation; TAS.
GO; GO:0009887; P:negative regulation of cell proliferation; TAS.
GO; GO:0007601; P:visual perception; TAS.
InterPro; IPR008161; Clg helix.
InterPro; IPR008165; Collagen.
InterPro; IPR008165; Collagen.
InterPro; IPR0081695; Cond. like lec_gl.
InterPro; IPR001791; Laminin_G.
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Triple-helical region 9 (COL9).
Nonhelical region 10 (COL10).
Triple-helical region 10 (COL10).
Nonhelical region 11 (Potential).
N'linked (GlCNAC. .) (Potential).
                                                                                                                                                                                                                                                                                        Cell adhesion; Collagen;
Hydroxylation; Polymorphism;
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(COL4).
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Nonhelical region 7 (NC7).
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                                                                                                                                                                                                                                                                                                                                                                                                                     Nonhelical region 1 (NC1).
Triple-helical region 1 (COL1).
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Triple-helical region 8 (COL8).
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Collagen alpha 1(XVIII) cháin
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Nonhelical region 3 (
Triple-helical region 4 (
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/FTId=VAR_018054
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/FTId=VAR_018055.
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By similarity.
Cell attachment
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[1] — SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
Halter W., Dong S., Schurer B., Cole G.J.;
"Collagen XVIII is a basement membrane heparan sulfate proteoglycan.";
J. Biol. Chem. 273:25404-25412(1998).
                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
MEDLINE=22980396; PubMed=14614989; DOI=10.1016/S0945-053X(03)00073-8;
Elamma H., Snellman A., Rehn M., Autio-Harmainen H., Pihlajaniemi T.;
"Characterization of the human type XVIII collagen gene and
proteolytic processing and tissue location of the variant containing frizzled motif:";
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Gallus gallus (Chicken).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;

Gallus.

NCBL TaxID=9031;
                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
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Pred. No. 0.26;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Matrix Biol. 22-427-442(2003).
| Matrix Biol. 22-427-442(2003).
| Rabi, Av484968; Aar83296.1; JOINED.
| Rabi, Av484969; Aar83296.1; JOINED.
| Matrix Biol. 22-427-443(2003).
| Rabi, Av484971; Aar83296.1; JOINED.
| Rabi, Coincolorate in the companies of the coincidence of the co
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05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Type XVIII collagen long variant.
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Last sequence update)
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Collagen.
SEQUENCE 1751 AA; 177
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                                                                                                                                              Homo sapiens (Human).
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                                                                                                                                       heterozygotes may cause Knobloch syndrome when in combination with a frameshift/truncating untation)
/FIId=VAR_012709.
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MEDLINE=22980396; PubMed=14614989; DOI=10.1016/S0945-053X(03)00073-8;
Blamma H., Snellman A., Rehn M., Autio-Harmainen H., Pihlajaniemi T.;
"Characterization of the human type XVIII collagen gene and
proteolylic processing and tissue location of the variant containing frizzled motif.";
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                             D -> N (decreased activity for binding laminin, increased risk of developing prostate cancer; in compound
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1516 AA; 153779 MW; 38D0F23D3FD758A4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MALLINE BIOLITY

MALLINE BIOLITY

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EMBL; AV484968; AAR83297.1; JOINED.

EMBL; AV484970; AAR83297.1; JOINED.

EMBL; AV484970; AAR83297.1; JOINED.

EMBL; AV484971; AAR83297.1; JOINED.

EMBL; AV484971; AAR83297.1; JOINED.

EMBL; AV484971; AAR83297.1; JOINED.

GO; GO:0005198; F: Structural molecule activity; IEA.

GO; GO:0005198; F: Structural molecule activity; IEA.

GO; GO:0006198; F: Structural molecule activity; IEA.

GO; GO:0006198; F: Structural molecule activity; IEA.

GO; GO:0006191; F: Structural molecule activity; IEA.

INTERPRO; IPR008161; Collagen.

INTERPRO; IPR008961; Collagen.

INTERPRO; IPR001363; DUF959.

INTERPRO; IPR001363; DUF959.

INTERPRO; IPR003129; TSP.N.

PÉTAN; PF01391; COLlagen.; G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-UUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
   FTIG=VAR 018056.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 86.8%; Score 59; DB 2, Best Local Similarity 85.7%; Pred. No. 0.22; Matches 12; Conservative 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT; 1516 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT; 1751 AA
                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Type XVIII collagen middle variant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Probom; PD000007; Clg helix; 1.
SMART; SM00210; TSPN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam; PF06121; DUF959; 1.
Pfam; PF06482; Endostatin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1402 VPIVNLKDELLFPS 1415
                                                                                                                                                                                                                                                                                                               86.8%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 VPIVNLKDEVLSPS 14
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                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Collagen.
SEQUENCE
                                                                                                                                                                                                                                                                                                               Query Match
                                VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q6RZ40
Q6RZ40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26RZ39;
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Q6RZ39

RESULT 13

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Gaps

; 0

RESULT 14 Q6RZ40

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Query Match

73.5%; Score 50; DB 2; Length 1344;
Best Local Similarity 90.9%; Pred. No. 8.4;
Matches 10; Conservative 1; Mismatches 0; Indels
                                                                                          SIGNAL 1 26 Potential.
SEQUENCE 1344 AA; 137402 MW; 7AA366E4FE940CCD CRC64;
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; 0

Gaps

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Search completed: March 10, 2005, 11:09:31 Job time : 57.3684 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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OM protein - protein search, using sw model

Run on:

(without alignments)
110.795 Million cell updates/sec March 10, 2005, 11:00:49; Search time 12.1579 Seconds

US-09-766-412-31 68 Title: Perfect score:

1 VPIVNLKDEVLSPS 14 Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 seqs, 96216763 residues Searched:

Total number of hits satisfying chosen parameters:

283416

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

PIR 79:* Database :

pirl:* pir2:* pir3:* 2 K 4

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	collagen alpha 1 (X		collagen alpha 1(X	ical pr	oxidoreductase hom	immunodominant 120	collagen alpha 1(X			hypothetical prote	DNA topoisomerase	hypothetical prote	protein F53C3.9 [i	origin recognition	60kDa inner-membra	endopeptidase La (hypothetical prote	hypothetical prote	>	hypothetical prote			_	•~	hypothetical prote	hypothetical prote	Φ		probable acetylorn
SUMMARIES	ID	A56101	B56101	A53019	T33540	T01387	JC6174	A53317	E90390	D71724	A97723	S41543	T04198	E88114	S68446	H82516	D70176	T25433	S40977	H83652	AF1948	T15452	F70410	G69134	H85214	873159	T20947	A89004	S42831	T11715
	DB	2	~	~	~	7	7	N	7	7	7	~	7	7	~	~	-	7	0	7	~	N	N	N	~	7	7	~	7	7
	Length	1315	1774	684	327	399	548	1388	187	264	266	887	334	485	535	265	813	1016	1222	425	107	170	190	261	308	319	337	364	404	441
٠	강당	100.0	100.0	86.8	63.2	58.8	58.8	58.8	57.4	57.4	57.4	57.4	55.9	55.9	55.9	55.9	55.9	55.9	55.9	. 55.1	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4
		68	69	59	43	40	40	40	39	39	39	39	38	38	38	38		38	38	37.5	37	37	37	37	37	37	37	37	37	37
	Result No.		7	m	4	S	9	7	œ	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		26	27	28	29

acetylornithine tr	conserved hypothet	hypothetical prote	hypothetical prote	serine-tRNA ligase .	hypothetical prote	hypothetical prote	elongation factor	translation elonga	hypothetical prote	hypothetical prote	serine/threonine-p	CbhE protein - Cox	probable aminotran	hypothetical prote	two-component sens
T42091	T39840	T16368	T15191	S66043	A95121	F97990	H97920	D95050	E75150	G64387	G75345	JQ1189	AB0077	C64401	AE1942
8	~	7	N	~	7	7	7	7	7	٦	~	0	~	7	0
442	268	759	1043	425	93	93	186	186	194	226	251	341	410	439	468
54.4	54.4	54.4	54.4	53.7	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
37	37	37	37	36.5	36	36	36	36	36	36	36	36	36	36	36
30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

_	A56101
	collagen alpha 1(XVIII) chain precursor, short splice form - mouse
	N;Contains: endostatin
	C;Species: Mus musculus (house mouse)
	C;Date: 03-Oct-1995 #sequence revision 08-May-1998 #text change 09-Jul-2004
	C;Accession: A56101; A58371; S72450; S65595
	R; Rehn, M.; Pihlajaniemi, T.
	J. Biol. Chem. 270, 4705-4711, 1995
	A, Title: Identification of three N-terminal ends of type XVIII collagen chains and tiss
	tif homologous to rat and Drosophila frizzled proteins.
	A; Reference number: A56101; MUID: 95181468; PMID: 7876242
	A; Accession: A56101
	A; Molecule type: mRNA
_	A;Residues: 1-103 <reh1></reh1>
	A; Cross-references: UNIPROT: P39061; GB:U11636; NID:g618427; PIDN:AAC52178.1; PID:g61842
_	R;Rehn, M.; Pihlajaniemi, T.

Proc. Natl. Acad. Sci. U.S.A. 91, 4234-4238, 1994 A;Title: Alphal(XVIII), a collagen chain with frequent interruptions in the collagenous A;Reference number: A58371; WUID:94240112; PMID:8183894

A, Molecule type: mRNA
A, Molecule type: mRNA
A, Molecule type: mRNA
A, Molecule type: mRNA
A, Residues: 1-928 (REH2)
A, Residues: 1-928 (REH2)
A, Cross-references: GB:L16898; NID:g404754; PIDN:AAA37434.1; PID:g553894
B; Oh, S.P.; Kamagata, Y.; Muragaki, Y.; Timmons, S.; Ooshima, A.; Olsen, B.R.
B, Molecule type: mRNA
A, Reference number: S72450
A, Molecule type: mRNA
A, Residues: 28-687, YL, 689-734, FV, 736-751, RV, 753-1315 cOHW>
A, Cross-references: EMBL:L22545; NID:g348968; PIDN:AAA19787.1; PID:g511298
R, Oh, S.P.; Kamagata, Y.; Muragaki, Y.; Timmons, S.; Ooshima, A.; Olsen, A.B.R.
Proc. Natl. Acad. Sci. U.S.A. 91, 4229-4233, 1994
A, Title: Isolation and sequencing of EDNAs for proteins with multiple domains of Gly-Xa
A, Title: Isolation and sequencing of EDNAs for proteins with multiple domains of Gly-Xa
A, Reference number: A58370; MUD:94240111; PMID:8183893
A, Accession: S65595
A, Molecule type: mRNA
A, Residues: 28-1315 cOHRS
A, Cross-references: EMBL:L22545
C, Comment: Prolines and lysines at the third position of the tripeptide repeating unit lated and subsequently O-G1ycosylated.
C, Comment: The different splice forms of collagen alpha 1(XVIII) may be involved in per C, Comment: Endostatin is released from collagen alpha 1(XVIII) chain by the action of U. A D. Constitution of the tripeptide repeating of U. A D. Constitution of the collagen alpha 1(XVIII) con of U. A D. COLLAGE COLLAGE CONTROLES COLLAGE CONTROLES CONTROLE

C;Genetics

A,Cross-references: MGI:71175
A;Map position: 10:41.0
C;Keywords: alternative splicing; angiogenesis inhibitor; chondroitin sulfate proteogly.
C;Keywords: alternative splicing; angiogenesis inhibitor; chondroitin sulfate proteogly.
F;1-25/Domain: signal sequence #status predicted <SIG>
F;24-225/Region: thrombospondin amino-terminal homologous
F;26-1315/Product: collagen alpha 1(XVIII) chain, short splice form #status predicted <

E.; B

```
A, Molecule type: protein
A, Residues: 1591-1610 < ORB>
A, Residues: 1591-1610 < ORB>
A, Experimental source: hemangioendothelium cells
A, Note: inhibite endothelial cell proliferation
C, Comment: Prolines and lysines at the third position of the tripeptide repeating unit lated and subsequently O-glycosylated.
C, Comment: The different gplice forms of collagen alpha 1(XVIII) may be involved in periC, Comment: Endostatin is released from collagen alpha 1(XVIII) chain by the action of un ay be useful in treating solid tumors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Map position: 10:41.0
A;Map position: 10:41.0
A;Introns: 1295/3; 1310/1; 1331/1; 1345/3; 1388/3; 1437/1; 1461/3; 1505/3; 1516/3; 1599,
A;Introns: 1295/3; 1310/1; 1331/1; 1346/3; 1388/3; 1437/1; 1461/3; 1505/3; 1516/3; 1599,
A;Note: the list of intromplete
C;Keywords: alternative splicing; angiogenesis inhibitor; chondroitin sulfate proteogly;
F;1-1774/Product: collagen alpha 1(XVIII) chain precursor, long splice form #status predicted
F;1-249/Domain: signal sequence #status predicted <SGOS-F;786-812/Domain: collagenous #status predicted <COO1>F;823-896/Domain: collagenous #status predicted <COO2>
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R;Oh, S.P.; Warman, W.L.; Seldin, M.F.; Cheng, S.D.; Knoll, J.H.M.; Timmons, S.; Olsen, Beonaics 19, 494-499, 1994
A;Title: Cloning of cDNA and genomic DNA encoding human type XVIII collagen and localiz. A;Reference number: A53019; MUID:94245237; PMID:8188291
           A, Title: Primary structure of the alphal chain of mouse type XVIII collagen, partial sti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Filo6-1148/Domain: collagenous #status predicted <CCO5-
Filo6-1148/Domain: collagenous #status predicted <CCO5-
Filo6-1148/Domain: collagenous #status predicted <CCO5-
Filo1-1331/Domain: collagenous #status predicted <CCO6-
Filo1-1353/Domain: collagenous #status predicted <CCO6-
Filo1-1353/Region: cell attachment (R-G-D) motif
Filo1-1353/Region: cell attachment (R-G-D) motif
Filo1-1354/Pomain: collagenous #status predicted <CCO10-
Filo1-1774/Product: endostatin #status predicted <CCO10-
Filo1-1774/Product: endostatin #status predicted <EST>
Filo2-1774/Product: endostatin #status predicted <EST>
Filo3-1774/Product: endostatin #status predicted <EST>
Filo2-1774/Product: endostatin #status predicted <EST>
Filo3-1774/Pro
                                                                                                                                                                                                                                                                                                                                                                              R;O'Reilly, M.S.; Boehm, T.; Shing, Y.; Fukai, N.; Vasios, G.; Lane, W.S.; Flynn, Cell 88, 277-285, 1997
A;Title: Endostatin: an endogenous inhibitor of angiogenesis and tumor growth.
A;Reference number: A58816; MUID:97160848; PMID:9008168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                collagen alpha 1(XVIII) chain - human (fragment)
N;Contains: endostatin
C;Species: Hono sapions (man)
C;Date: 18-Aug-1995 #sequence_revision 18-Aug-1995 #text_change 15-Sep-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Molecule type: mRNA
A;Residues: 1-684 <OHA-
A;Cross-references: GB:L22548; NID:9348908; PIDN:AAA51864.1; PID:9562794
A;Cross-references: GB:L22548; NID:9348908; IS not in Genbank release 103
A;Note: the cited accession number, L25548, is not in Genbank release 103
                                                                                                                                                                                                                             A; Molecule type: DNa; mRNA
A;Residues: 1293-1403,'R',1405-1774 <REH3>
A;Cross-references: GB:U03714; NID:g487733; PIDN:AAA20657.1; PID:g487734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      F;921-1042/Domain: collagenous #status predicted <CO03>
                                                                                                                    A; Reference number: A54072; MUID: 94245707; PMID: 8188673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1659 VPIVNLKDEVLSPS 1672
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Best Local Similarity 100.
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A,Gene: MGI:Coll8al
A,Cross-references: MGI:71175
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Accession: A58816
                                                                                 collagen chain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
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CiSpecies: Mus musculus (house mouse)
CiSpecies: Mus musculus (house mouse)
CiDate: 03-0ct-1995 #sequence revision 08-May-1998 #text change 09-Jul-2004
CiAccession: B56101; C56101; 32456; 865595; FN0675; A54072; A58816
CiAccession: B56101; C56101; A75471; 1995
A;Title: Identification of three N-terminal ends of type XVIII collagen chains and tissu tif homologous to rat and Drosophila frizzled proteins
A;Reference number: A56101; MUD:95181468; PMID:737642
A;Reference number: A56101; MUD:95181468; PMID:737642
A;Residues: B5610
A;Residues: B5610
A;Residues: 1-562. KREH1>
A;Residues: 1-562. KREH1>
A;Residues: 1-562. KREH1>
A;Residues: 1-562. KREH1>
A;Residues: 1-519,447.562 KREH2>
A;Residues: C5610
A;Recession: C5610
A;Residues: C5610
A;Residues: B310467; MID:G618429
A;Residues: B310467. MID:G618429
A;Residues: A7. Muragaki, Y.; Timmons, S.; Ooshima, A.; Olsen, B.R.
B;Oh, S.P.; Kamagata, Y.; Muragaki, Y.; Timmons, S.; Ooshima, A.; Olsen, B.R.
A;Residues: BMB:122545; MID:G48896; PIDN:AA19787.1; PID:G511298
A;Residues: BMB:122545; MID:G48870.1; PMID:G18893
A;Residues: BMB:122545; MID:G48890; PMID:G18893
A;Residues: BMB:1225433, 1994
A;Residues: BMB:1225455, MBB:125455, MBB:125455, MBB:125455, MBB:125455, MBB:125455, MBB:125455, MBB:125455, MBB:125455, MBB:125455
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Biochem. Biophys. Res. Commun. 196, 576-582, 1993
A;Title: Identification of a novel collagen chain represented by extensive interruptions A;Reference number: PN0675, MUID:94059075; PMID:8240330
A;Molecule type: mRNA
A;Molecule type: mRNA
A;Residues: 635-1774 <ABE>
B;Rehn, M.; Hintikka, E.; Pihlajaniemi, T.
J. Biol. Chem. 269, 13929-13935, 1994
F;327-353/Domain: collagenous #status predicted <CO2>
F;364-37/Domain: collagenous #status predicted <CO2>
F;466-1893/Domain: collagenous #status predicted <CO3>
F;607-689/Domain: collagenous #status predicted <CO3>
F;607-689/Domain: collagenous #status predicted <CO3>
F;704-745/Domain: collagenous #status predicted <CO5>
F;759-831/Domain: collagenous #status predicted <CO6>
F;842-847/Region: collagenous #status predicted <CO6>
F;887-910/Domain: collagenous #status predicted <CO6>
F;887-910/Domain: collagenous #status predicted <CO6>
F;887-910/Domain: collagenous #status predicted <CO6>
F;981-135/Product: endostatin #status predicted <CO9>
F;132-1315/Product: endostatin #status predicted <EST>
F;1132-1315/Product: endostatin #status predicted <EST>
F;1132-1315/Product: endostatin #status predicted <EST>
F;1132-1316/Briding site: carbohydrate (Asn) (covalent) #status predicted <F;240,245,1257/Binding site: carbohydrate (Ser) (covalent) #status predicted F;240,245,1257/Binding site: carbohydrate (Ser) (covalent) #status predicted
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nes 14; Conservative C
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A; Molecule type: mRNA
A; Residues: 487-1512, 7L',1514-152;
A; Cross-references: EMBL:122545
R; Abe, N.; Muragaki, Y.; Yoshioka,
Biochem. Biophys. Res. Commun. 194
A; Title: Identification of a novel
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Best Local S
Matches 14
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Gaps

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A,Status: translated from GB/EMBL/DDBJ
A,Molecule type: DNA
A,Residues: 1-399 <PAR>
A;Residues: 1-399 <PAR>
A;Cross-references: UNIPROT:Q9ZTA2; EMBL:AF069442; NID:g3242970; PID:g3924598
A;Experimental source: cultivar Columbia
C;Genetics:
                                                                                                                                                                                                                                                                                                                           A,Introns: 123/2; 167/3; 313/3
A,Note: T419.6
C;Superfamily: 1-aminocyclopropane-1-carboxylate oxidase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 40; DB 2
Pred. No. 25;
4; Mismatches
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Best Local Similarity 50.v.
Retroat 7; Conservative
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LPLINLADKTLEP 20
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Best Local Similarity
Matches 6; Conserv
            A; Accession: T01387
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A;Note: in the authors' translation, 482-Gly is not shown, residues 483-490 are shifted C;Comment: Prolines and lysines at the third position of the tripeptide repeating unit (lated and subsequently O-glycosylated.
C;Comment: Different splice forms of collagen alpha 1(XVIII) may be involved in perivase C;Comment: Endostatin is released from collagen alpha 1(XVIII) chain by the action of un ay be useful in treating solid tumors.
                                                                                                                                                                                                                                                                                                                       A/Cross-references: GDB:138752, OMIM:120328
A/Map position: 21q22.3-21q22.3
C;Keywords: alternative splicing; angiogenesis inhibitor; chondroitin sulfate proteoglyc
C;Keywords: alternative splicing; angiogenesis inhibitor; chondroitin sulfate proteoglyc
C;Keywords: collagen alpha 1(XVIII) chain (fragment) #status predicted <CO4>
F;1-59/Domain: collagenous #status predicted <CO6>
F;74-115/Domain: collagenous #status predicted <CO6>
F;122-244/Domain: collagenous #status predicted <CO7>
F;25-778/Domain: collagenous #status predicted <CO7>
F;25-244/Region: cell attachment (R-G-D) motif
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C; Species
C; Species
C; Caenornabditis elegans
C; Accession: T3340
C; Accession: T33540
C; Accessio
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R; Parnell, L.D.; Gnoj, L.; de la Bastide, M.; Hameed, A.; Habermann, K.; Schutz, K.; Hua submitted to the BMBL Data Library, May 1998
A; Description: Genomic sequence of BAC T419 from Arabidopsis thaliana, chromosome IV, ne A; Reference number: Z14314
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C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 12-Feb-1999 #sequence_revision 12-Feb-1999 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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F;384-371/Domain: collagenous #status predicted <CO10>
F;507-684/Product: endostatin #status predicted <EST>
F;509-684/Region: multiplexin collagen carboxyl-terminal homologous
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C;Species: Caenorhabditis elegans
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Pred. No. 0.016;
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Pred. No. 5.6;
1; Mismatches
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Best Local Similarity 64.3%;
Matches 9; Conservative
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Best Local Similarity 85.7
Matches 12; Conservative
                                                                                                                                                                                                                                                                                             A; Gene: GDB: COL18A1
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C, Accession: JC6174
R, Yu, X.; Crocquet-Valdes, P.; Walker, D.H.
R, Yu, X.; Crocquet-Valdes, P.; Walker, D.H.
R, Yu, X.; Crocquet-Valdes, P.; Walker, D.H.
A; Title: Cloning and sequencing of the gene for a 120-kDa immunodominant protein of Ehr
A; Reference number: JC6174; MuID: 97183655; PMID: 9031621
A; Accession: JC6174
A; Molecule type: DNA
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A;Cross-references: UNPROT:Q46976; GB:U49426; NID:g1864025; PIDN:AAC44861.1; PID:g1864
C;Comment: This protein is an immunodominant antigen of Ehrlichia chaffeensis which reathogenicity of Ehrlichia chaffeensis and stimulating protective immunity in humans.
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C;Species: Homo sapiens (man)
C;Date: 07-Jul-1995 #sequence revision 07-Jul-1995 #text_change 09-Jul-2004
C;Date: 07-Jul-1995 #sequence revision 07-Jul-1995 #text_change 09-Jul-2004
C;Date: 07-Jul-1995 #sequence revision 07-Jul-1995 #text_change 09-Jul-2004
C;Accession: A3317, A33146, 288778
S;Kivirikko, S.; Heinaemaeki, P.; Rehn, M.; Honkanen, N.; Myers, J.C.; Pihlajaniemi, T.
J. Biol. Chem. 269, 4773-4779, 1994
A;Pitle: Primary structure of the alpha1 chain of human type XV collagen and exon-intro-A;Reference number: A53317; MUD:94148920; PMID:8106446
A;Accession: A53317
A;Status: preliminary
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A, Residues: 1-1388 «KIV>
A, Residues: 1-1388 (KIV>
A, Residues: 1-1388 (KIV>
A, Arcoss-references: UNIPROT: D39959; GB:L25280
A, Muragaki, Y: Abe, N.; Ninomiya, Y: Olsen, B.R.; Ooshima, A.
J. Biol. Chem. 269, 4042-4046; 1394
A. Title: The human alphal (XV) collagen chain contains a large amino-terminal non-triple
A, Reference number: A53146
A, Accession: A53146
A, Accession: Drellminary
A, Accession: Preliminary
A, Molecule type: mRNA
A, Residues: 1-9, S', 11-48, 'V', 50-94, 'A', 96-149, 'A', 151-203, 'V', 205-408, 'A', 410-569 «MUR
A, Cross-references: GB:D21230; NID:g415605; PIDN:BAA04762.1; PID:d1005294; PID:g460703
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C;Species: Bhrlichia chaffeensis
C;Date: 11-Apr-1997 #sequence_revision 09-May-1997 #text_change 09-Jul-2004
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2; Length 399;
                                                                            3; Indels
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Gaps

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Gaps

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A;Accession: S78064
A;Molecule type: DNA
A;Residues: 1-784,'S',786,'C',788-887 <FOW>
A;Cross-references: EMBL:M9727; NID:9478995; PIDN:AAA22859.1; PID:9478996
A;Cross-references: strain 7702
A;Experimental source: strain 7702
R;Okinaka, R.T.; Cloud, K.; Hampton, O.; Hoffmaster, A.R.; Hill, K.K.; Keim, P.; Koehle
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A,Title: Sequence and organization of pXO1, the large Bacillus anthracis plasmid harbor A,Reference number: A59091; MUID:99445483; PMID:10515943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A, Cross-references: UNIPROT: 092J84; GB: AE006914; PIDN: AAL02723.1; PID: 915619234; GSPDB: C, Genetics:
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R. Fouct, A.; Sirard, J.C.; Mock, M.
submitted to the EMBL Data Library, May 1994
A, Description: Bacillus anthracis pXO1 virulence plasmid encodes a type 1 DNA topoisome
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A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: DNA
A;Residues: CB:AF065404; NID:g4894216; PIDN:AAD32445.1; PID:g4894357
A;Experimental source: strain Sterne
A;Experimental source: strain Sterne
A;Note: similar to type 1 DNA topoisomerase, top1, plasmid pX01; B. anthracis (M97227)
C;Genetics:
A;Gene: topX; pX01-142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Species: Bacillus anthracis
C;Date: 19-Mar-1997 #sequence revision 19-Mar-1997 #text_change 09-Jul-2004
C;Accession: S41543; S78064; E59108
R;Fouet, A.; Sirard, J.C.; Mock, M.
Mol. Microbiol. 11, 471-479, 1994
Mol. Microbiol. 11, 471-479, 1994
A;Tritle: Bacillus anthracis pXO1 virulence plasmid encodes a type 1 DNA topoisomerase.
A;Reference number: S41543; MUID:94203050; PMID:8152371
                                                                                                                                                                                                                                                                                                                                                                             Cispecies: Ricketţsia conorii 20. Sep-2001 #text_change 09-Jul-2004 Cispecies: Ricketţsia conorii 20. Sep-2001 #sequence_revision 30-Sep-2001 #text_change 09-Jul-2004 Ciscosion: A97723 Ricketsia, H.; Audic, S.; Renesto-Audiffren, P.; Fournier, P.B.; Barbe, V.; Samson, Science 293, 2093-2008, 2001 Ajrtie: Mechanisms of Evolution in Rickettsia conorii and Rickettsia prowazekii. Ajreference number: A97700; MUID:21442074; PMID:11557893
                                                                                                                                                                                                                                                                                                                                          hypothetical protein RC0185 [imported] - Rickettsia conorii (strain Malish 7)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               topoisomerase (EC 5.99.1.2) - Bacillus anthracis virulence plasmid pXO1
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   Length 264;
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   Score 39; DB 2
Pred. No. 23;
3; Mismatches
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Pred. No.
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A,Residues: 1-887 <FOU>
A,Cross-references: UNIPROT:P40114
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      57.4%;
                                      63.68;
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Matches 7; Conservative
                                                                      7; Conservative
                                                                                                                                                                                             152
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                                                                                                                                   4 VNLKDEVLSPS
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142 VDSKDEIISPS
         Query Match
Best Local Similarity
Matches 7; Conserv
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R;Myers, J.C.; Kivirikko, S.; Gordon, M.K.; Dion, A.S.; Pihlajaniemi, T.
Proc. Natl. Acad. Sci. U.S.A. 89, 10144-10148, 1992
A;Title: Identification of a previously unknown human collagen chain, alphal(XV), charac A;Reference number: S28778; MUID:93066196; PMID:1279671
A;Retence number: S28778
A;Retus: preliminary
A;Residues: Psteliminary
A;Residues: S44-640, P', 642-811, P', 813-1252 <MYE>
C;Genetics:
A;Genetics:
A;Genetics:
A;Genetics: A;Genetics: GDB:132578; OMIM:120325
A;Map position: 9221-932
A;Map position: 9221-932
B;Map position: ajgnal sequence #status predicted <SIG>B;Collsdan alpha 1(XV) chain #status predicted <MAT>
F;23-1388/Region: multiplexin collagen carboxyl-terminal homologous
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A;Residues: 1-187 <KUR>
A;Cross-references: UNIPROT:Q97WK6; GB:AE006641; NID:g13815510; PIDN:AAK42380.1; GSPDB:G
C;Genetics:
A;Gene: SSO2210
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Cycacesian D71724
RyAndersson, S.G.E.; Zomorodipour, A.; Andersson, J.O.; Sicheritz-Ponten, T.; Alsmark, Nature 396, 133-140, 1998
Nature 396, 133-140, 1998
Nature 396, 133-140, 1998
Ayîtile: The genome sequence of Rickettsia prowazekii and the origin of mitochondria. A;Recession: D77724
A;Reference number: A71630; MUID:99039499; PMID:9823893
A;Recession: D77724
A;Residues: D7724
A;Residues: 1-264 <AND>
A;Residues: 1-264 <AND>
A;Residues: I-264 <AND>
A;Residues: I-264 <AND>
A;Residues: I-264 <AND>
A;Residues: I-264 <AND>
A;Cross-references: UNIPROT:Q9ZE19; GB:AJ235270; GB:AJ235269; NID:g3860572; PIDN:CAN146
C;Genetics:
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A, Reference number: A99139
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Species: Rickettsia prowazekii
Date: 21-Nov-1998 #sequence_revision 21-Nov-1998 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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Pred. No. 15;
3; Mismatches
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1273 LPIVNLKGQVL 1283
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Matches 8; Conservative
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56 PIYDLKDDILS 66
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A; Status: preliminary
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A;Molecule type: DNA
A;Residues: 1-535 <LEA>
A;Cross-references: UNIPROT:Q09142; EMBL:U38472; NID:g1185460; PIDN:AAC49165.1; PID:g11
R;Seeger, K.; Harris, D.; Wood, V.; Rajandream, M.A.; Barrell, B.G.
submitted to the EMBL Data Library, March 1999
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C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004
C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004
C;Datession: #82316
R;anonymous, The Xylella fastidiosa Consortium of the Organization for Nucleotide Seque. Nature 406, 151-157, 2000
A;Title: The genome sequence of the plant pathogen Xylella fastidiosa.
A;Title: The genome sequence of the plant pathogen Xylella fastidiosa.
A;Reference number: A82515; MUID:20365717; PMID:10910347
A;Note: for a complete list of authors see reference number A59328 below
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A;Status: preliminary
A;Residues: 1-565 <SIM>
A;Residues: 1-565 <SIM>
A;Residues: 1-565 <SIM>
A;Cross-references: UNIPROT: Q9P9U1; GB:AE004083; GB:AE003849; NID:g9108022; PIDN:AAF855
A;Experimental source: strain 9a5c
R;Simpson, A.U.G.; Reinard, E.C.; Arruda, P.; Abreu, F.A.; Acencio, M.; Alvarenga, R.; Rsimpson, A.U.G.; Relanco, M.R.P.; Camargo, A.A.; Camargo, L.E.A.; Carraro, D.M.; Carrer, Sas-Neto, E.; Bueno, M.R.P.; Camargo, A.A.; Camargo, L.E.A.; Carraro, D.M.; Carrer, Sas-Neto, E.; Docena, C.; El-Dorry, H.; Facincani, A.P.; Ferreira, A.J.S.
sa-Neto, E.; Docena, C.; El-Dorry, H.; Facincani, A.P.; Ferreira, A.J.S.
sa-Neto, E.; Docena, C.; Ferro, J.A.; Franca, A.J.S.
sa-Neto, E.; Docena, C.; Franco, M.C.; Franco, M.C.; Franco, M.C.; Franco, M.C.; Mauchins, C.B.; Mauchins, E.M.F.; Matsukuma, A.Y.; Menck, C.F.M.; Miracca, E.C.; Miyaki, C.Y.; F.G.; Nunes, L.R.; Olivakira, M.A.; de Olivekira, M.C.; de Olivakira, R.C.; Palmieti, D.; Rodrigues, V.; Rosa, A.J., de M.; de Rosa Jr., V.E.; de Sa, R.G.; Santelli, R.V.; Sawasa, A,Authors da Silva, A.C.; da Silva, A.M.; Silva Jr., W.A.; da Silva, A.M.; Silva Jr., W.A.; da Silva, A.D.; A,Reference number: A59328
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C;Superfamily: probable 60K inner membrane protein; stage III sporulation protein homol
recognition complex protein, subunit 2 - fission yeast (Schizosaccharomyces pomb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: EMBL:AL049474; PIDN:CAB39366.1; GSPDB:GN00067; SPDB:SPBC685.09
A;Experimental source: strain 972h-; cosmid c685
C;Genetics:
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                                    NyAlternate names: replication factor Orp2
C,Species: Schizosacdnaromyces pombe
C,Species: Schizosacdnaromyces pombe
C,Accession: S68446; T40640
C,Accession: S68446; T40640
R;Leatherwood, J, Lopez-Girona, A.; Russell, P.
Nature 379, 360-363, 1996
A;Title: Interaction of Cdc2 and Cdc18 with a fission yeast ORC2-like protein.
A;Reference number: S68446; MUID:96149252; PMID:8552194
A;Status: nucleic acid sequence not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Map position: 2
C;Function:
A;Description: interacts with the rate-limiting replication activator Cdc18
C;Keywords: DNA replication; nucleus
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A,Accession: T40640
A,Status: preliminary; translated from GB/EMBL/DDBJ
A,Molecule type: DNA
A,Residues: 1-535 <SEE>
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Pred. No. 83;
3; Mismatches
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Best Local Similarity 57.1%;
Matches 8; Conservative
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112 VPLYSLEAEPLSPS 125
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C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: LO.May-2001 #sequence_revision 10-May-2001 #text_change 09-Jul-2004
C;Accession: B88114
R;anonymous, The C. elegans Sequencing Consortium.
Science 282, 2012-2018, 1998
A;Title: Genome sequence of the nematode C. elegans: a platform for investigating biolog A;Reference number: A75000; MUID: 99069613; PMID: 9851916
A;Note: see websites genome.wustl.edu/gsc/C_elegans/ and www_sanger.ac.uk/Projects/C_ele A;Note: published errata appeared in Science 283, 35, 1999; Science 283, 2103, 1999; and A;Status: preliminary
A;Noteconsion: B88114
A;Status: preliminary
A;Mesidues: 1-485 <STO>
A;Coss-references: UNIPROT:Q9TXTO; GB:chr_II; PIDN:AC67460.1; PID:g3786487; GSPDB:GNOOG C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C. Species: Arabidopsis thaliana (moustern cress)
C. Date: 30-Apr-1999 #sequence_revision 30-Apr-1999 #text_change 09-Jul-2004
C. Date: 30-Apr-1999 #sequence_revision 30-Apr-1999 #text_change 09-Jul-2004
C. Date: 30-Apr-1999 #sequence_revision 30-Apr-1999 #text_change 09-Jul-2004
C. Date: 30-Apr-1999 #sequence_revision 30-Apr-1999
R. Beron, M.; Wedler, H.; Wedler, E.; Wambutt, R.; Bancroft, I.; Mewes, H.W.; Mayer, K.F.
submitted to the Protein Sequence Database, March 1999
A.; Reference number: Z15260
A.; Reference number: Z15260
A.; Residues: 1-334 < BEV>
A.; Residues: 1-34 < BE
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Pred. No. 47;
0; Mismatches 4; Indels
                                                                                                                                Length 887,
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Pred. No. 74;
2; Mismatches 4; Indels
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A,Map position: 2
C,Superfamily: Caenorhabditis elegans ZK1236.4 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hypothetical protein T4F9.90 - Arabidopsis thaliana
                                                                                                                            Score 39; DB 2;
Pred. No. 1e+02;
5; Mismatches
A;Genome: plasmid
C;Keywords: DNA binding; isomerase
                                                                                                                       Query Match
Best Local Similarity 46.2%;
Matches 6; Conservative
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Best Local Similarity 66.7%;
Matches 8; Conservative
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Best Local Similarity 53.8%;
Matches 7; Conservative
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0; Gaps Query Match 55.9%; Score 38; DB 2; Length 565; Best Local Similarity 54.5%; Pred. No. 88; Matches 6; Conservative 4; Mismatches 1; Indels

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1 VPIVNLKDEVL 11 ||:|:|:|| 74 VPVINVKTDVL 84

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Search completed: March 10, 2005, 11:10:08 Job time : 13.1579 secs

us-09-766-412-31.rapb

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March 10, 2005, 11:07:00 ; Search time 85.1053 Seconds (without alignments) 54.260 Million cell updates/sec
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'GGNZ_6/ptodata/2/pubpaa/US07_NEW_PUB. DED: *

'GGNZ_6/ptodata/2/pubpaa/US06_PUBGOMB. DED: *

'GGNZ_6/ptodata/2/pubpaa/US06_PUBGOMB. DED: *

'GGNZ_6/ptodata/2/pubpaa/US08_PUBCOMB. DED: *

'GGNZ_6/ptodata/2/pubpaa/US09_PUBCOMB. DED: *

'GGNZ_6/ptodata/2/pubpaa/US09_PUBCOMB. DED: *

'GGNZ_6/ptodata/2/pubpaa/US09_PUBCOMB. DED: *

'GGNZ_6/ptodata/2/pubpaa/US10B_PUBCOMB. DED: *

'GGNZ_6/ptodata/2/pubpaa/US11_NEW_PUB. DED: *

'GGNZ_6/ptodata/2/pubpaa/US11_NEW_PUB. DED: *

'GGNZ_6/ptodata/2/pubpaa/US11_NEW_PUB. DED: *

'GGNZ_6/ptodata/2/pubpaa/US10B_PUBCOMB. DED: *

'GGNZ_6/ptodata/2/pubpaa/US0B_PUBCOMB. DED: *

'GGNZ_6/ptodata/2/pubpaa/US0B_PUBCOMB. DED: *

'GGNZ
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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1396920 segs, 329844858 residues
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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68
1 VPIVNLKDEVLSPS 14
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Maximum DB seq length: 200000000
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Description	Sequence 31, Appl	Sequence 46, Appl	Sequence 18, Appl	Sequence 13, Appl	Sequence 13, Appl	Sequence 13, Appl	Sequence 2, Appli	Sequence 3, Appli	Sequence 71, Appl	Sequence 2, Appli	Sequence 1, Appli	Sequence 5, Appli	Sequence 11, Appl
ID	US-09-766-412-31	US-10-131-241-46	US-10-292-418-18	US-10-920-820-13	US-09-998-831-13	US-10-373-561-13	US-09-373-938-2	US-10-080-797-3	US-10-422-934-71	US-10-468-759-2	US-09-822-540A-1	US-09-978-531-5	US-09-978-531-11
DB	σ	14	14	17		14	σ	13	14	15	σ	σ	6
% Query Match Length DB	14	184	184	184	191	191	207	207	207	43	63	63	63
& Query Match	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	86.8	86.8	86.8	86.8
Score	89	68	68	89	68	68	69	89	69	29	29	59	59
Result No.	-	~	m	4	Ŋ	9	7	œ	6	10	11	12	13

Sequence 12, Appl Sequence 164, App	sequence 3, Appil Sequence 60, Appl	Sequence 5, Appli	Sequence 57, Appl	Sequence 47, Appl	Sequence 56, Appl	Sequence 55, Appl	14,	Sequence 54, Appl	'n	Sequence 14, Appl	~	ų	Sequence 1, Appli	Sequence 52, Appl	4	Sequence 11, Appl	Sequence 2, Appli	Sequence 12, Appl		4,	Sequence 4, Appli	5,	Sequence 2, Appli	9	30	Sequence 5, Appli	Seguence 166, App	Sequence 3, Appli	4
31	9 US-U9-9/8-531-3 14 US-10-131-241-60	14 US-10-042-347-5	14 US-10-131-241-57	14 US-10-131-241-47	14 US-10-131-241-56	14 US-10-131-241-55	9 US-09-998-831-14	14 US-10-131-241-54	14 US-10-042-347-3	14 US-10-373-561-14	9 US-09-873-676-2	9 US-09-978-531-1	13 US-10-080-797-1	14 US-10-131-241-52	14 US-10-292-418-4	15 US-10-135-872B-11	15 US-10-607-501-2	17 US-10-920-820-12	15 US-10-210-172-162	16 US-10-449-609-4	17 US-10-849-650-4	9 US-09-373-938-5	17 US-10-849-650-2	US-1	÷	US-09	14 US-10-060-036-166	15 US-10-431-642-3	10 US-09-938-391-4
139	171	178	179	180	180	181	182	182	182	182	183	183	183	183	183	183	183	183	184	184	185	208	220	385	682	684	1516	1516	184
86.8 86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	85.3
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ALIGNMENTS

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RESULT 1

US-09-766-412-31

US-09-766-412-31

US-09-766-412-31

Sequence 31, Application US/09766412

Patent No. US20020103129A1

GENERAL INFORMATION:

TITLE OF INVENTION: SMALL PEPTIDES HAVING ANTI-ANGIOGENIC AND ENDOTHELIAL CELL INHIB

TITLE OF INVENTION: ACTIVITY

TITLE OF INVENTION: ACTIVITY

FILE REPRENCE: 1781-0215P

CURRENT PILIAR DATE: 2001-01-11

NUMBER OF SEQ ID NOS: 50

SOGTWARE: PatentIn version 3.1

LENGTH: 14

TYPE: PRT

CREAVISM: Mammalian

SEQ ID NO 31

LENGTH: 14

TYPE: PRT

CREAVISM: Mammalian

FEATURE:

NAME/KEY: misc feature

OCHEN MACKEY: misc feature

OCHEN MACK
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Gaps

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Sequence 13, Application US/10373561

Publication No. US20030175276A1

GENERAL INFORMATION:
APPLICANT: Philip E. Thorpe

APPLICANT: Rolf A. Brekken

TITLE OF INVENTION: ANTIBODY METHODS FOR SELECTIVELY INHIBITING VEGF

FILE REFERENCE: 4001.002582

CURRENT APPLICATION NUMBER: US/10/373,561

PRIOR FILING DATE: 2003-02-24

PRIOR FILING DATE: 2000-04-28

PRIOR FILING DATE: 1999-04-28

NUMBER OF SEQ ID NOS: 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Description of Artificial Sequence: SYNTHETIC US-09-998-831-13
                                                                                                                                                                                                                                                                                      Length 184;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 68; DB 9; Length 191; 100.0%; Pred. No. 0.0006; tive 0; Mismatches 0; Indel8
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                                                                                                                                                                                                                                                                                             Score 68; DB 17;
Pred. No. 0.00058;
CURRENT APPLICATION NUMBER: US/10/920,820
CURRENT FILING DATE: 2004-08-17
PRIOR APPLICATION NUMBER: US/09/938,391
PRIOR FILING DATE: 2001-08-24
PRIOR PILING DATE: 2001-08-25
PRIOR PLING DATE: 2000-08-25
NUMBER OF SEQ ID NOS: 15
SOFTWARE: Patentin version 3.2
SEQ ID NO 13.
                                                                                                                                                                                                                                                                                                                                 Mismatches
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                                                                                                                                                                                                                                                                                             100.0%;
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ORGANISM: Artificial Sequence
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Best Local Similarity 100.
Matches 14; Conservative
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Best Local Similarity
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US-10-920-820-13
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                                                                                                                                                                                           LENGTH: 184
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                     APPLICANT: Errier, Anne H.

TITLE OF INVENTION: Compositions and Methods for Inhibiting Endothelial Cell Prolifer
TITLE OF INVENTION: Compositions and Methods for Inhibiting Endothelial Cell Prolifer
TITLE OF INVENTION: and Regulating Angiogenesis Using Cancer Markers
FILE REPERENCE: 05213-0344 43170-271565
CURRENT APPLICATION NUMBER: US/10/131,241
CURRENT FILING DATE: 1999-10-06
PRIOR APPLICATION NUMBER: US 09/413,049
PRIOR APPLICATION NUMBER: US 09/413,049
PRIOR APPLICATION NUMBER: US 60/316,802
PRIOR APPLICATION NUMBER: US 60/316,806
PRIOR APPLICATION NUMBER: US 60/086,586
PRIOR PILING DATE: 1998-05-22
NUMBER OF SEQ ID NOS: 65
SOFTWARE: Patentin version 3.1
SEQ ID NO 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 13, Application US/10920820
Publication No. US20050009144A1
GENERAL INFORMATION:
APPLICANT: Pfizer, Inc. and Pfizer Products, Inc.
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND TREATING DISORDERS
FILE REFERENCE: 3153.00234/PCI0790A
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APPLICANT: Li, Yue
APPLICANT: Li, Yue
APPLICANT: Li, Yue
TITLE OF INVENTION: Expression and Export of Angiogenesis Inhibitors as
TITLE OF INVENTION: Immunofusins
FILE REFERENCE: LEX-006C1
CURRENT APPLICATION NUMBER: US/10/292,418
CURRENT FILING DATE: 2002-11-12
PRIOR APPLICATION NUMBER: US 60/097,883
PRIOR PELING DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 54
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 18
LENGTH: 184
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Pred. No. 0.00058;
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Best Local Similarity 100.0%; Pred. No. 0.0
Matches 14; Conservative 0; Mismatches
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; Sequence 18, Application US/10292418
; Publication No. US20030139365A1
; GENERAL INFORMATION:
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Best Local Similarity 100.
Matches 14; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Mus musculus
US-10-292-418-18
                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Murinae sp. US-10-131-241-46
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                                                                                                  Sequence 71, Application US/10422934

Publication No. US20030186841A1

GENERAL INFORMATION:
APPLICANT: Barbas, Carlos F., III
APPLICANT: Beerli, Roger
CURRENT APPLICATION NUMBER: US/10/422, 934
CURRENT APPLICATION NUMBER: US/10/422, 934
CURRENT PILING DATE: 2003-04-23
PRIOR APPLICATION NUMBER: 09/483, 042
PRIOR APPLICATION NUMBER: 09/433, 042
PRIOR APPLICATION NUMBER: 09/433, 042

PRIOR APPLICATION NUMBER: 09/433, 042

PRIOR APPLICATION NUMBER: 09/433, 042

PRIOR APPLICATION NUMBER: 09/433, 042

PRIOR APPLICATION NUMBER: 09/433, 042

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PRIOR APPLICATION NUMBER: 09/433, 042

PRIOR APPLICATION NUMBER: 09/433, 042

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PRIOR APPLICATION NUMBER: 09/433, 042

PRIOR APPLICATION NUMBER: 09/433, 042
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Pred. No. 0.0044;
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Publication No. US20040073007A1
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Peptides with angiogenic activity
FILE REFERENCE: 683pct
CURRENT APPLICATION NUMBER: US/10/468,759
CURRENT FILING DATE: 2003-08-25
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin version 3.1
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Patent No. US20020058620A1
GENERAL INFORMATION:
APPLICANT: Phoenix Pharmaceuticals, Inc.
TITLE OF INVENTION: Cell Growth Regulation System
FILE REFERENCE: PhoenixPharFull
CURRENT APPLICATION NUMBER: US/09/822,540A
CURRENT FILING DATE: 2001-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Muridae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-422-934-71
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Publication No. US20020115202A1
GENERAL INFORMATION:
APPLICANT: Hallenbeck, Paul
APPLICANT: Chen, Cheauyun Theresa
TITLE OF INVENTION: ADENOVIRAL VECTORS INCLUDING DNA SEQUENCES ENCODING ANGIOGENIC IN
FILES OF SEQ ID NOS: 17
CURRENT APPLICATION NUMBER: US/09/373,938
CURRENT FILING DATE: 1999-08-13
NUMBER OF SEQ ID NOS: 17
SEQ ID NO 2
LENGTH: 207
ILENGTH: 207
TYPE: PRT
ORGANISM: MUB musculus
US-09-373-938-2
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                                                                                                                ; OTHER INFORMATION: Description of Artificial Sequence: SYNTHETIC US-10-373-561-13
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100.0%; Score 68; DB 14; Length 191;
Best Local Similarity 100.0%; Pred. No. 0.0006;
Matches 14; Conservative 0; Mismatches 0; Indels
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; Pred. No. 0.00066;
0; Mismatches 0;
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Publication No. US2002018325341
GENERAL INFORMATION:
APPLICANT: Campoolinaro, Peter A.
APPLICANT: Dixon, Katharine H.
APPLICANT: Brazzell, Romulus K.
TITLE OF INVENTION: METHOD FOR TREATING OCULAR;
TITLE OF INVENTION: NEOVASCULARIZATION
FILE REFERENCE: 4-31881A
CURRENT APPLICATION NUMBER: US/10/080,797
CURRENT APPLICATION NUMBER: US/20/080,797
CURRENT APPLICATION OF SEQ 10 NOS: 21
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ 10 NO 3
LENGTH: 207
TYPE: RT
ORGANISM: Mouse
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Best Local Similarity 100.0%;
Matches 14; Conservative 0;
                                                                         ORGANISM: Artificial Sequence
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Best Local Similarity 100.
Matches 14; Conservative
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SEQ ID NO 13
LENGTH: 191
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US-09-978-531-12
US-09-978-531-12
Publication No. US20020086007A1
Publication No. US20020086007A1
Publication No. US20020086007A1
GENERAL INFORMATION
APPLICANT: Sim, Kim Lee
APPLICANT: Liang, Hong
TITLE OF INVENTION: Anglogenesis-Inhibiting Peptides and Proteins and Methods of Use
TITLE REFERENCE: 05213-0811 43170-264992
CURRENT APPLICATION NUMBER: US/09/978,531
CURRENT PILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: US 60/240,127
PRIOR APPLICATION NUMBER: US 60/240,127
NUMBER OF SEQ ID NOS: 13
NUMBER OF SEQ ID NOS: 13
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TITLE OF INVENTION: THERAPRUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHOP
FILE REFERENCE: 21402-416 A
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Pred. No. 0.017;
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Sequence 164, Application US/10210172
Publication No. US20040043928A1
GENERAL INFORMATION:
APPLICANT: Kekuda, Ramesh
APPLICANT: Miller Charles
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Casman, Stacie
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Alsobrook II, John
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Zerhusen, Bryan
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Rastelli, Luca
Spytek, Kimberly
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MacDougall, John
                        1 VPIVNLKDEVLSPS 14
                                                                6 VPIVNLKDELLFPS 19
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Voss, Edward
Boldog, Ferenc
Gorman, Linda
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Best Local Similarity 85.7
Matches 12; Conservative
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Vernet, Corine
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Ji, Weizhen
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US-09-978-531-11
is Sequence 11, Application US/09978531
is Sequence 11, Application US/09978531
is Publication No. US20020086007A1
is GENERAL INFORMATION:
is APPLICANT: Sim, Kim Lee
is APPLICANT: Anglogenesis-Inhibiting Peptides and Proteins and Methods of Use
is TILE OF INVENTION: ANGHER: US/09/978,531
is CURRENT APPLICATION NUMBER: US 60/240,127
is PRIOR FILING DATE: 2000-10-13
is NUMBER: OF SEQ ID NOS: 13
is SOFFWARE: PatentIn version 3.1
is SEQ ID NO 11
is LENGTH: 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 5, Application US/09978531
Sequence 5, Application US/09978531
Publication No. US20020086007A1
GENERAL INFORMATION:
APPLICANT: Liang, Hong
TITLE OF INVERTYON: Anglogenesis-Inhibiting Peptides and Proteins and Methods of Use
FILE REFERENCE: 05213-0811 43170-264992
CURRENT APPLICATION NUMBER: US/09/978,531
CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: US 60/240,127
PRIOR APPLICATION NUMBER: US 60/240,127
PRIOR FILING DATE: 2000-10-13
NUMBER OF SEQ ID NOS: 13
SEQ ID NO 5
LENGTH: 63
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Pred. No. 0.0068;
1; Mismatches 1; Indels
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Pred. No. 0.0068;
1; Mismatches 1; Indels
                                                                                                                                                                                                                    86.8%; Score 59; DB 9; Length 63; 85.7%; Pred. No. 0.0068;
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PRIOR APPLICATION NUMBER: 60/194,561
PRIOR FILING DATE: 2000-04-03
NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
LENGTH: 63
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Best Local Similarity 85.7
Matches 12; Conservative
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Best Local Similarity 85.7
Matches 12; Conservative
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Matches 12; Conservative
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CORGANISM: Homo sapiens
US-09-978-531-5
                                                                                                                              TYPE: PRT

ORGANISM: Homo sapiens

US-09-822-540A-1
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US-09-978-531-5
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CURRENT APPLICATION NUMBER: US/10/210,172

CURRENT FILING DATE: 2001-08-01

PRIOR PILING DATE: 2001-08-02

PRIOR APPLICATION NUMBER: 60/329,501

PRIOR PILING DATE: 2001-09-21

PRIOR APPLICATION NUMBER: 60/313,994

PRIOR PILING DATE: 2001-09-21

PRIOR PILING DATE: 2001-09-19

PRIOR PILING DATE: 2001-09-03

PRIOR PILING DATE: 2001-08-08

PRIOR PILING DATE: 2001-08-08

PRIOR PILING DATE: 2001-08-08

PRIOR PILING DATE: 2001-08-09

PRIOR PILING DATE: 2001-08-09

PRIOR PILING DATE: 2001-08-09

PRIOR PILING DATE: 2001-08-09

PRIOR PILING DATE: 2001-08-10

PRIOR PILING DATE: 2001-08-10

PRIOR PILING DATE: 2001-08-16

PRIOR PILING DATE: 2001-08-16

PRIOR PILING DATE: 2001-08-17

PRIOR PILING DATE: 2001-08-17
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Db 44 VPIVNLKDELLFPS 57

1 VPIVNLKDEVLSPS 14

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0; Gaps

86.8%; Score 59; DB 15; Length 160; 85.7%; Pred. No. 0.02; Live 1; Mismatches 1; Indels

Query Match 86.8 Best Local Similarity 85.7 Matches 12; Conservative Search completed: March 10, 2005, 11:15:27 Job time : 86.1053 secs

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Sequence 13, Appl
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                                                         March 10, 2005, 11:04:09; Search time 28.3684 Seconds (without alignments) 36.840 Million cell updates/sec
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/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
GenCore version 5.1.6
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US-09-561-005-14
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Maximum Match 100%
Listing first 45 summaries
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US-09-602-787A-300	US-09-589-483-20	US-08-159-784-3	US-08-656-034-10	US-08-656-034-2	US-09-489-039A-8940	US-09-134-000C-5491	US-08-742-753-2	US-09-248-796A-18167	US-09-583-110-3743	US-09-583-110-3896	US-09-107-433-3585	US-09-902-540-16239	US-09-949-016-8279	US-09-328-352-4724	US-09-902-540-11469	US-09-248-796A-15109	US-09-270-767-32217	
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ALIGNMENTS

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Sequence 13. Application US/09938391A

Sequence 13. Application US/09938391A

Sequence 13. Application US/09938391A

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND TREATING DISORDERS
TITLE OF INVENTION:
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                                                                                                                               Sequence 31, Application US/09385442
Sequence 31, Application US/09385442
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Sequence 31, Application Sequence 31, Application Sequence 31, Applicant On Sequence 31, Applicant Sequence 31, Applicant Sequence 31, Sequence
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Matches 14; Conservative
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ORGANISM: mammalian
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US-09-938-391A-13
RESULT 1
US-09-385-442-31
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Sequence 13, Application US/09561499

Batent No. 6524583

GENERAL INFORMATION:

APPLICANT: Philip E. Thorpe

APPLICANT: Rolf A. Brekken

TITLE OF INVENTION: ANTIBODY METHODS FOR SELECTIVELY INHIBITING VEGF

FILE REFERENCE: 4001.002582

CURRENT FILING DATE: 2000-04-28

PRIOR APPLICATION NUMBER: 06/131,432

PRIOR APPLICATION NUMBER: 66/131,432

NUMBER OF SEQ ID NOS: 44

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 13

LENGTH: 191
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GENERAL INFORMATION:
APPLICANT: Philip E. Thorpe
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ORGANISM: Artificial Sequence
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    76 VPIVNLKDEVLSPS 89
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Batent No. 634221
GENERAL INFORMATION:
APPLICANT: Philip E. Thorpe
APPLICANT: Philip E. Thorpe
APPLICANT: ROLf A. Brekken
TITLE OF INVENTION: ANTIBODY CONJUGATE COMPOSITIONS FOR SELECTIVELY INHIBITING VEGF
FILE REPERENCE: 4001.002584
CURRENT APPLICATION NUMBER: US/09/561,108
CURRENT PILING DATE: 1999-04-28
PRIOR PELICATION NUMBER: 60/131,432
PRIOR PELICATION NUMBER: 60/131,432
PROBER OF SEQ ID NOS: 44
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 13
MUMBER OF SEQ ID NO 13
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US-09-561-500-13
Sequence 13, Application US/09561500
Fedent No. 6342219
GENERAL INFORMATION:
APPLICANT: Philip B. Thorpe
APPLICANT: Rolf A. Brekken
TITLE OF INVENTION: ANITHEDY COMPOSITIONS FOR SELECTIVELY INHIBITING VEGF
FILE REPERENCE: 4001.002500
CURRENT APPLICATION NUMBER: US/09/561,500
CURRENT FILING DATE: 2000-04-28
FRIOR APPLICATION NUMBER: 60/131,432
PRIOR PILING DATE: 199-04-28
NUMBER OF SEQ ID NOS: 44
SOUTHWARE: PATENTING US: 2.0
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US-09-561-108-13
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0; Mismatches 0; Indels
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                                                               Length 184;
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                                                          Query Match
100.0%; Score 68; DB 4; L
Best Local Similarity 100.0%; Pred. No. 0.00013;
Matches 14; Conservative 0; Mismatches 0;
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Best Local Similarity 100.0%;
Matches 14; Conservative 0
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; ORGANISM: MURINE
US-09-938-391A-13
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LENGTH: 191
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Pred. No. 0.0016;
1; Mismatches 1; Indels
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Patent No. 6835806
GENERAL INFORMATION:
APPLICANT: Chang, Jaw-Kang
TITLE OF INVENTION: Cell Growth Regulation System
FILE REFERENCE: PhoenixPharFull
CURRENT APPLICATION NUMBER: US/09/822,540A
CURRENT PILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 60/194,561
PRIOR FILING DATE: 2000-04-03
NUMBER OF SEQ ID NOS: 2
SOFTWARE: PATENTIN VERSION 3.1
                   CALP: 0.211-2.804

CAMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50z or 558X
CORRATIOR SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/159,784
FILING DATE: December 1, 1993
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 29,066
RESTRENCE DOCKENT INFORMATION:
NAME: John F. Freeman
REGISTRATION NUMBER: 29,066
RESTRENCE DOCKET NUMBER: 29,066
RESTRENCE TO INFORMATION:
TELEPONN: (617) 542-8906
TELEPAN: 000146
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; Patent No. 6346510
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 195
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Best Local Similarity 85.7
Matches 12; Conservative
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Best Local Similarity 100.
Matches 14; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
STRANDEDNESS: N/A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TOPOLOGY: N/A
US-08-159-784-2
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US-09-315-689-5
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Batent No. 6703020
GRNERAL INFORMATION:
APPLICANT: Philip E. Thorpe
APPLICANT: Rolf A. Brekken
TITLE OF INVENTION: ANTIBODY CONJUGATE METHODS FOR SELECTIVELY INHIBITING VEGF
FILE REPERENCE: 4001.002585
CURRENT APPLICATION NUMBER: US/09/561,005
FILE REPERENCE: 2000-04-28
PRIOR APPLICATION NUMBER: 60/131,432
PRIOR PELING DATE: 1999-04-28
NUMBER OF SEQ ID NOS: 44
SEQ ID NO 13
LENGTH: 191
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APPLICANT: Rolf A. Brekken
TITLE OF INVENTION: ANTIBODY CONJUGATE COMPOSITIONS FOR SELECTIVELY
TITLE OF INVENTION: INHIBITING VEGF
FILE REPERENCE: 4001.002584
CURRENT APPLICATION NUMBER: US/09/998,831
CURRENT APPLICATION NUMBER: 09/561,108
PRIOR PILING DATE: 2001-11-30
PRIOR PILING DATE: 2000-04-28
NUMBER OF SEQ ID NOS: 44
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 13
LENGTH: 191
TYPE: PRT
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, OTHER INFORMATION: Description of Artificial Sequence: SYNTHETIC US-09-998-831-13
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US-09-561-005-13
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Patent No. 5643783

GENERAL INFORMATION:
APPLICANT:
TITLE OF INVENTION:
OCRESPONDENCES:
CORRESPONDENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE:
Babon
STREET: 225 Franklin Street
CITY:
Boston
STATE:
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence
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Gaps

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Gaps

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GENERAL INFORMATION:
APPLICANT: Philip E. Thorpe
APPLICANT: Rolf A. Brekken
TITLE OF INVENTION: ANTIBODY CONJUGATE KITS FOR SELECTIVELY INHIBITING VEGF
FILE REFERENCE: 4001.002586
CURRENT APPLICATION NUMBER: 108/09/561,526
CURRENT FILING DATE: 2000-04-28
PRIOR APPLICATION NUMBER: 60/131,432
PRIOR APPLICATION NUMBER: 60/131,432
PRIOR APPLICATION NOWES: 44
NUMBER OF SEC ID NOS: 44
SOFTWARE: PATCHIN Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-00-315-689-3
US-00-315-689-3
US-00-315-689-3
Sequence 3, Application US/09315689
Sequence 3. Application US/09315689
Settle No. 6346510
SEMERAL INFORMATION:
APPLICANT: FOLKman, Judah
TITLE OF INVENTION: Therapeutic Antiangiogenic Endostatin Compositions
FILE REFERENCE: 05213-0229
CURRENT FILING DATE: 1999-05-20
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.0
SOFTWARE: Patentin Ver. 2.0
                                                                                    CTHER INFORMATION: DESCRIPTION of Artificial Sequence: SYNTHETIC // OTHER INFORMATION: PEPTIDE US-09-561-108-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 59; DB 3; Length 182;
Pred. No. 0.0053;
1; Mismatches 1; Indels
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Pred. No. 0.0053;
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; OTHER INFORMATION: PEPTIDE
US-09-561-526-14
                                                                                                                                                                                                                                   Score 59; DB 3
Pred. No. 0.005
1; Mismatches
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TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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ORGANISM: Artificial Sequence
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Best Local Similarity 85.7%;
Matches 12; Conservative
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Best Local Similarity 85.7
Matches 12; Conservative
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Best Local Similarity 85.7
Matches 12, Conservative
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US-09-315-689-3
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SEQ ID NO 14
LENGTH: 182
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APPLICANT: Philip E. Thorpe
APPLICANT: Philip E. Thorpe
APPLICANT: Rolf A. Brekken
TITLE CANT: Rolf A. Brekken
TITLE REPERENCE: 4001.002584
CURRENT FILING DATE: 2000-04-28
CURRENT FILING DATE: 1999-04-28
RICH APPLICATION NUMBER: 60/131,432
PRIOR FILING DATE: 1999-04-28
NUMBER OF SEQ ID NOS: 44
SOFTWARE: PatentIN Ver. 2.0
SEQ ID NO 14
LENGTH: 182
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Patent No. 634219
GENERAL INFORMATION:
APPLICANT: Philip E. Thorpe
APPLICANT: Philip E. Thorpe
TITLE OF INVENTION: ANTIBODY COMPOSITIONS FOR SELECTIVELY INHIBITING VEGF
FILE REPRENCE: 4001.002500
CURRENT APPLICATION NUMBER: US/99/561,500
CURRENT FILING DATE: 2000-04-28
RIOR APPLICATION NUMBER: 60/131,432
PRIOR FILING DATE: 1999-04-28
NUMBER OF SEQ ID NOS: 44
SOFTWARE: PATENTIN VET: 2.0
       APPLICANT: Folkman, Judah
APPLICANT: O'Reilly, Michael
TITLE OF INVENTION: Therapeutic Antiangiogenic Endostatin Compositions
FILE REPERENCE: 05213-0229
CURRENT APPLICATION NUMBER: US/09/315,689
CURRENT FILING DATE: 1999-05-20
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.0
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FEATURE:

OTHER INFORMATION: DESCRIPTION OF Artificial Sequence: SYNTHETIC

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Pred. No. 0.0052;
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Pred. No. 0.0053;
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US-09-561-108-14
: Sequence 14, Application US/09561108
: Patent No. 6342221
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Best Local Similarity 85.7
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 85.7
Matches 12; Conservative
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US-09-561-500-14
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Gaps

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Search completed: March 10, 2005, 11:11:31 Job time: 29.3684 secs

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Copyright (c) 1993 - 2005 Compugen Ltd.
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OM protein - protein search, using sw model

March 10, 2005, 10:55:58; Search time 71.1053 Seconds (without alignments) 76.150 Million cell updates/sec Run on:

US-09-766-412-31 68 1 VPIVNLKDEVLSPS 14 Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

2105692 seqs, 386760381 residues Searched:

2105692

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

A_Geneseq_16Dec04:* Database

genesequ1988s; genesequ1990s; genesequ2000s; genesequ2001s; genesequ2003s; genesequ2003bs; genesequ2003bs;

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	Aab74257 Exempl	Aab80863 Angiostat	Abg97540 Antiangio	Aab35585 Antiangio	Aab49807 Murine en	_		Aay08689 Murine en	Aay70258 Murine an	Aab49380 Murine en	Abg31793 Human end	Abu64290 Murine en	Aab28398 Murine en	Aau77950 Amino aci	Aae02031 Murine en	Aab71930 Murine en	Abb79902 Mouse end	Adn00602 Murine en	Ado43904 Amino aci	Aay08691 Murine ge	Murin	Aay25114 Mouse alp	Mouse	Aaw92297 Mouse alp	Abo84585 Mouse can
	ID	AAB74257	AAB80863	ABG97540	AAB35585	AAB49807	AAM49504	AAY18409	AAY08689	AAY70258	AAB49380	ABG31793	ABU64290	AAB28398	AAU77950	AAE02031	AAB71930	ABB79902	ADN00602	ADO43904	AAY08691	AAY08692	AAY25114	AAW26328	AAW92297	AB084585
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	Score	89	89	68	68	68	68	68	69		89	68	68	89	68	68	68	9	68	68	68	68	68	68	68	69
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ABO84584 ABG31788 ABB08121 ADE40258	AAU00900 AAU00901 AAU00899	AAU00898 AAY59622 AAY94323	AAB28399 AAU00897 AAU77951 AAY02113	AAY08693 AAY70252 AAY90771	AAB16451 AAB30493
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222 208 208 208 208	332	35 35 36	6 8 8 9 0 7 8 8 0	4 4 4 1 2 6	44 5

ALIGNMENTS

plasminogen; VEGF; vascular endothelial growth factor; Peptides comprising a portion of a protein selected from plasminogen, endostatin, VEGF, FLT-1 and KDR/FLK-1 are useful for treating primary Exemplary anti-angiogenic peptide #31. Anti-angiogenesis; plasminogen; VE FLT-1; tumour; metastasis; cancer. Ä AAB74257 standard; peptide; 14 99SG-00004310. 01-SEP-2000; 2000WO-SG000131. (UYSI-) UNIV SINGAPORE NAT. (first entry) WPI; 2001-257785/26. WO200118030-A2. Ge R, Kini RM; Homo sapiens. 03-SEP-1999; 23-MAY-2001 15-MAR-2001. AAB74257; RESULT 1 AAB74257

endostatin, VI tumor growth.

Claim 7; Page 18; 34pp; English.

The present invention relates to anti-angiogenesis peptides from a portion of a selected from plasminogen, endostatin, VEGF or FLT-1. The invention is used to prevent or treat primary tumour growth or metastasis or undesired angiogenesis

Sequence 14 AA;

ö Gaps ö Query Match 100.0%; Score 68; DB 4; Length 14; Best Local Similarity 100.0%; Pred. No. 3.6e-05; Matches 14; Conservative 0; Mismatches 0; Indels

1 VPIVNLKDEVLSPS 14

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29-MAY-2001

AAB80863;

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AAB80863

13-MAR-2001

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The invention discloses a peptide comprising a portion of a protein e.g. plasminogen, endostatin (Endo-1-4), vascular endothelial growth factor (VEGF), FLT-1 or kinase insert domain containing receptor/FLK-1. These peptides are able to act as potent angiogenic inhibitors (Angio-1-5) inhibiting endothelial cell proliferation and retarding tumour growth. Angiogenesis is the process of new blood vessel formation from precessed, involving endothelial cell proliferation, migration and assembly into tubule structures. It plays an important role in normal physiological functions such as embryonic development and wound healing. Complicions including tumour growth and metastasis, rheumatoid arthritis and psoriasis. Anticancer therapy by inhibiting tumour angiogenesis is conditions including tumour growth and metastasis, rheumatoid arthritis and psoriasis. Anticancer therapy by inhibiting tumour angiogenesis is called antiangiogenic therapy. VEGF is a endothelial specific mitogen that functions through two high affinity tyrosine kinase receptors, FUT-1 and FLK-1 (not defined). Protein-protein interactions are crucial to many physiological and pharmacological processes and the peptides disclosed interactions. The sequences presented in ABG97510-ABG97559 are examples of
                                                                                                                                                                                                                                                                                                                                                                 Novel peptide for preventing/treating undesired angiogenesis, has a portion of a protein e.g. plasminogen, endostatin, and potent antiangiogenic activity and endothelial cell proliferation inhibition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 68; DB 5; I 100.0%; Pred. No. 3.6e-05; ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antiangiogenic; angiogenesis; cancer; endostatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antiangiogenic pentacontapeptide II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB35585 standard; peptide; 50 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 9; Page 10; 24pp; English.
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                                                                                                                                                  98US-0099313P.
99US-00385442.
                                                                                                      22-JAN-2001; 2001US-00766412.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antiangiogenic peptides
                                                                                                                                                                                                                                                                                                                          WPI; 2002-749595/81.
                                                                                                                                                                                                               (GERR/) GE R. (KINI/) KINI R M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 14 AA;
                  US2002103129-A1
                                                                                                                                                                                                                                                                                    Kini RM;
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                                                                                                                                                  04-SEP-1998;
30-AUG-1999;
                                                             01:-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB35585;
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                                                                                                                                                                                                                                                                                                                                                                                                                                          activity
                                                                                                                                                                                                                                                                                 Ge R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence is a peptide which is effective in inhibiting undesirable angiogenesis. Angiogenesis is the process of new blood vessel formation from pre-existing vessels. Inappropriate angiogenesis is associated with various pathological. Conditions including solid tumour growth and metastasis. The present peptide can be used to to prevent tumour metastasis or inhibit the growth of a primary tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peptides having potent anti-angiogenic activity, useful for the treatment of tumors, comprise a portion of a {\rm FLT}{}^{-1} protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Angiogenesis; plasminogen; endostatin; Endo-; VEGF; vascular endothelial growth factor; FLT-1; kinase insert domain; FLK-1; angiogenic inhibitor; Angio-; endothelial cell; proliferation; tumour growth, blood vessel formation; migration; tubule structure; embryonic development; wound healing; tumour metastasis; rheumatoid arthritis; psoriasis; anticancer; therapy; anticance therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                    Cytostatic; angiogenesis inhibitor; tumour metastasis; tumour growth
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Col 15-16; 21pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABG97540 standard; peptide; 14 AA
                                                                                                               AAB80863 standard; peptide; 14 AA.
                                                                                                                                                                                                                                             Angiostatin-derived peptide #20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antiangiogenic peptide, Endo-3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0099313P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-00385442
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 VPIVNLKDEVLSPS 14
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    1 VPIVNLKDEVLSPS 14
                                                                                                                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-SEP-1998;
                                                                                                                                                                                                                                                                                                                                   Unidentified
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Gaps ;

26-OCT-2000.

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ABG97540;

RESULT 3

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ABG97540

Query Match

Best Loca Matches

Length 14; 0; Indels

Gaps

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Gene clone of inhibitory factor for hyperplasia of inner blood vessel cells in human body's real tumor, and its use in anti-tumor blood vessel
               of prematurity, macular degeneration, corneal graft rejection, retrolental fibroplasia, rubeosis, capillary proliferation in atherosclerotic plaques and osteoporosis. Other angiogenesis-dependent diseases include Osler-Webber syndrome, myocardial angiogenesis, plaque neovasculisation, telangiectasia, haemophiliac joints and wound granulation. In addition, the peptides can be used as birth control
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention describes a novel preparation which inhibits the proliferation of blood vessel endothelium and prevents the regeneration activity of tumour blood vessels. The preparation can also be used as a biological preparation in the treatment of tumours. This sequence represents the murine endostatin protein described in the invention
 retinopathy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Endostatin; murine; proliferation; blood vessel endothelium; regeneration; tumour; blood vessel; treatment; amplification.
vessels such as diabetic retinopathy, neovascular glaucoma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 68; DB 5; Length 183; 100.0%; Pred. No. 0.00069; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                     Length 108;
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                                                                                                                                                                                                   100.0%; Score 68; DB 4; I
100.0%; Pred. No. 0.00038;
ive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                            AAM49504 standard; protein; 183 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /label= Ser, Phe
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Best Local Similarity 100.00
Conservative
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mouse endostatin protein.
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                                                                                                                                                                                                                                                                                                     46 VPIVNLKDEVLSPS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-106746/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Misc-difference 181
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Best Local Similarity
                                                                                                                                                                Sequence 108 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  regeneration.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                AAM49504;
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                                                                                                                             agents
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Endostatin; antiangiogenic; angiogenesis; human; mouse; chicken; cancer; inflammation; angiogenesis-dependent disease.
                                                                                                                                                                                                                  Polypeptides derived from endostatin exhibiting antiangiogenic activity useful for treatment of angiogenesis-dependent tumors.
                                                                                                                                                                                                                                                                                                         The present invention describes a number of peptides derived from endostatin which exhibit antianglogenic activity. These may be used in the treatment of cancer. The present sequence is one of the peptides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Endostatin peptide comprising at least four endostatin amino acid residues are e.g. angiogenesis inhibitors for treating cancer and diabetic retinopathy.
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0
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Pred. No. 0.00016;
Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                             Ziche M;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB49807 standard; protein; 108 AA.
                                                                                                                                                                                                                                                                          Claim 3; Page 18; 28pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.0%;
Matches 14; Conservative 0
               11-APR-2000; 2000WO-EP003236.
                                                  99IT-MI000777
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                                                                                                                                             Francescato P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30 VPIVNLKDEVLSPS 43
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FIRENZE.
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                                                                                                                                                                                 WPI; 2001-007005/01
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 50 AA;
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                                                  15-APR-1999;
                                                                                      UYMI-) UNIV
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14-JUL-1999;
                                                                                                                                           Chillemi F,
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                                                                                                        (UYFI-)
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AAB49807
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Gaps

Plasminogen, murine; angiostatin; endostatin; gene therapy; vector; anti-angiogenic; attenuation; cytostatic; anti-diabetic; ophthalmology; tumour growth; solid tumour; diabetic retinopathy; retina.

Murine endostatin protein fragment.

(first entry)

10-AUG-1999

AAY08689;

(MASI) MASSACHUSETTS INST TECHNOLOGY.

(GENE-) GENETIX PHARM INC

98WO-US024950. 97US-00975424.

20-NOV-1998; 20-NOV-1997;

WO9926480-A1

Mus

03-JUN-1999.

Bachelot T;

Leboulch P, Pawliuk RJ,

WPI; 1999-357696/30. N-PSDB; AAX77715.

Anti-angiogenic gene therapy vectors.

Disclosure, Fig 6; 83pp; English.

AAY08689 standard; protein; 184 AA.

69 VPIVNLKDEVLSPS

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activity, such as angiogenesis dependent cancers, banjan tumours, rheumatoid arthritis, psoriasis, ocular angiogenesis, Osler-Webber Syndrome, myocardial angiogenesis, plaque neovascularisation, telangiectasia, haemophiliac joints, angiofibroma, wound granulation, intestinal adhesions, atheroselerosis, scleroderma, hypertrophic scars, cat scratch disease, Helicobacter pylori ulcers, dialysis graft vascular access stenosis, contraception and obesity. In particular, the methods provide a means for introducing EMI into mammalian cells via gene therapy, for production of EMI via recombinant means, as well as recombinant production of EMI via recombinant means, as well as angiogenic diseases in that increasingly smaller peptides are more potent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence is the mouse endostatin. The invention relates to a the mutant endostatin (EM), which has anti-angiogenic activity, and is designated EMI. Compositions comprising EMI or fusion proteins comprising EMI, are useful for treating diseases characterised by angiogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              angiogenic diseases in that increasingly smaller peptides are more potent
on a weight basis, and may be able to better penetrate tissues
                                                                                                                                                                                benign tumour; rheumatoid arthritis; psoriasis; ocular angiogenesis; oslar-webber Syndrome; myocardial angiogenesis; angiofibroma; cancer; plaque neovascularisation; telangiectasia; atherosclerosis; scleroderma; dialysis graft vascular access stenosis; renal cancer; therapy.
                                                                                                                                                                   endostatin; angiogenesis-dependent cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Score 68; DB 2; Length 184;
; Pred. No. 0.0007;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mutant endostatin having anti-angiogenic activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (BETH-) BETH ISRAEL DEACONESS MEDICAL CENT.
                 AAY18409 standard; protein; 184 AA.
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                                                                                                                                                                 EM1; anti-angiogenic peptide;
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100.0%;
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98US-0082663P.
98US-0108536P.
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                                                                                                                              Endostatin protein sequence.
                                                                                         (first entry)
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Best Local Similarity 100.
Matches 14; Conservative
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N-PSDB; AAX79949.
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                                                                                                                                                                                                                                                                                                                  WO9929855-A1.
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16-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sukhatme VP;
                                                                                           24-AUG-1999
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                                                      AAY18409;
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AAY18409
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This invention describes a novel viral gene therapy vector comprising a nucleic acid molecule encoding an anti-angiogenic polypeptide chosen from human or murine andiogenic polypeptide chosen from inhibiting fusions and fragments, where the viral vector is sufficiently attenuated for use in human gene therapy. The products of the invention have anti-angiogenic, cytostatic, anti-diabetic and ophthalmological activity. The vector is used in gene therapy for inhibiting tumour growth in humans harbouring a solid tumour. The vector expresses an anti-angiogenic polypeptide. An additional use comprises treatment of diabetic retinopathy, where the anti-angiogenic polypeptide inhibits angiogenesis in the vicinity of the retina. The vector is administered to cells exvivo and then administered to the patient
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Murine, immunoglobulin Fc fragment, endostatin, immunofusin, angiogenesis, inhibitor; cytostatic; antirheumatoid, antiatrhritic, antipsoriatic, antidabetic; ophthalmological; immunosuppressant; vasotropic; vulnerary; treatment, antiarteriosclerosis; tumour;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 68; DB 2; Length 184; 100.0%; Pred. No. 0.0007; Pred. 0; Mismatches 0; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Murine angiogenesis inhibitor, endostatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY70258 standard; protein; 184 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   69 VPIVNLKDEVLSPS 82
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
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Gaps

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VPIVNLKDEVLSPS 82

RESULT 8

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VPIVNLKDEVLSPS

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Endostatin peptide comprising at least four endostatin amino acid

diabetic retinopathy

02-MAY-2000; 2000WO-US012063

WO200067771-A1

16-NOV-2000

99US-0132907P. 99US-00353333

06-MAY-1999; 14-JUL-1999;

(BURN-) BURNHAM INST

WPI; 2001-040937/05.

Vuori K;

N-PSDB; AAC88290

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a signal sequence, an immunoglobulin For region, an angiogenesis inhibitor selected from angiostatin, endostatin, a plasminogen fragment having angiostatin activity, a collagen XVIII fragment having endostatin activity, or combinations of them. The funion protein (immunofusin) is used to inhibit angiogenesis and to treat diseases or conditions mediated by angiogenesis. Conditions that may be treated include solid tumours, by angiogenesis. Conditions metastasis, benign tumours including mediated became angiogenesis. Conditions metastasis, benign tumours including the memangiomas, acoustic neuromas, neurofibromas, trachomas and pyrogenic standomas, frbumuatoid arthritis, psoriasis, ocular angiogenic diseases e.g. diabetic retinopathy, retinopathy of prematurity macular degeneration, corneal graft rejection, neovascular glaucoma, retrolental confibroplasia, rubeosis and osler-webber syndrome; myocardial angiogenesis, plaque neovascularisation, telangiectasia, haemophiliac joints' angiofibroma, wound granulation, and excessive or abnormal stimulation of endothelial cells, intestinal cells, atherosclerosis, sclerodermal and hypertrophic scars, i.e. keloid scars. The DNA constructs may be used in the construction of immunofusin murine immunoglobulin Fc fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                Novel fusion protein of angiostatin or endostatin and an immunoglobulin FC region, useful for treating conditions mediated by angiogenesis, such as rheumatoid arthritis, tumors and macular degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Endostatin; antiangiogenic; angiogenesis; human; mouse; chicken; cancer; inflammation; angiogenesis-dependent disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The patent discloses a DNA molecule encoding a fusion protein comprising
metastasis; atherosclerosis; psoriasis; rheumatoid arthritis; ocular angiogenic disease; diabetic retinopathy; macular degeneration; myocardial angiogenesis; plaque neovascularisation; telangiectasia; wound granulation; keloid scar; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                  99WO-US019329
                                                                                                                                                                                                                                                         98US-0097883P
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                                                                                                                                                                                                                                                                                                                                    Li Y, Gillies SD;
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hes 14; Conservative
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N-PSDB; AAZ51299.
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                                                                                                                                    WO200011033-A2.
                                                                                               Mus musculus,
                                                                                                                                                                                                                  25-AUG-1999;
                                                                                                                                                                                                                                                         25-AUG-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-MAR-2001
                                                                                                                                                                         02-MAR-2000
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Matches
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AAB49380
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                                                                                                                                                                                                                                                                  The present invention provides endostatin peptides which can be used in the modulation of angiogenesis. This is useful in the treatment of cancers, inflammation, rheumatoid arthritis, chronic articular rheumatism, psoriasis, disorders associated with inopportune invasion of prematurity, macular degeneration, corneal graft rejection, retrolental fibroplasia, tubososis, capillary proliferation in atherosclerotic plaques and osteoporosis. Other angiogenesis-dependent diseases include osler-webber syndrome, mycoardial angiogenesis, plaque neovasculisation, telangiectasia, haemophiliac joints and wound granulation. In addition, the peptides can be used as birth control
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Pred. No. 0.0007;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; endostatin; tumour; cancer; metastasis; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chillemi F, Vicentinie LMT, Francescato P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABG31793 standard; protein; 184 AA.
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100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             69 VPIVNLKDEVLSPS
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 184 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antiangiogenic.
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The present invention relates to anti-Vascular Endothelial Growth Factor (VEGF) antibodies that bind to the same epitope as the monoclonal antibody ATCC PFA 1595 and which significantly inhibit VEGF binding to the VEGF receptor VEGFR2, without inhibiting VEGF binding to the VEGF receptor VEGFR1. The present sequence is murine endostatin. Endostatin may be conjugated onto the anti-VEGF antibodies of the present invention. The anti-VEGF antibodies of the present invention are useful for the treatment and diagnosis of cancer, especially vascularised solid tumours
neovascularisation, choroidal neovascularisation, retinal neovascularisation, age-related macular degeneration, visual impairment, occular dysfunction, loss of vision, retinopathy, or blindness in a human. The present sequence is a protein shown in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Immunogenic composition for the treatment and diagnosis of cancer comprises an anti-VEGF (vascular endothelial growth factor) antibody binding the same epitope as the monoclonal antibody ATCC PTA 1595.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Murine; endostatin; cytostatic; antiproliferative; vascular endothelial growth factor; VEGF; antibody; VEGF2 receptor; cancer; vascularised solid tumour.
                                                                                                                                                                              100.0%; Score 68; DB 7; Length 184; 100.0%; Pred. No. 0.0007;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 68; DB 3; 1
100.0%; Pred. No. 0.00073;
                                                                                                                                                                                                                          0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                             AAB28398 standard; protein; 191 AA.
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                                                                                                                                                                                                                            14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Thorpe PE, Brekken RA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-687317/67.
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les 14; Conserv
                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Murine endostatin.
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                                                                                                                                     Sequence 184 AA;
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                                                                                              invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB28398;
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                                                                                                                                                                                Query Match
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                                                                                                                                                                                                                            Matches
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AAB28398
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                                                                    New peptide useful for the preparation of medicaments with antiangiogenic activity that may be used in treating tumors or metastases, comprises a sequence corresponding to fragments of human endostatin.
                                                                                                                                                                                                                     sequences corresponding to the human endostarin polymeptide sequence, its salt or non-toxic derivative. The peptides are useful in the preparation of medicaments with antianglogenic activity which may be useful in treating tumours or metastages. This sequence represents a human endostatin polymeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to an adeno-associated viral (AAV) vector comprising a polynucleotide that comprises a nucleic acid segment that encodes a choroidal or ocular neovascularisation inhibitory polypeptide operably linked to a promoter that expresses the segment to produce the polypeptide in a selected mammalian host cell. Such a vector is useful for providing a choroidal or coular neovascularisation inhibitory polypeptide to a mammal, for use in the therapy of ocular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel adeno-associated viral vector comprising polynucleotide encoding pigment epithelium-derived factor, useful for treating choroidal neovascularization, blindness, loss of vision.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                       The invention relates to peptide comprising 20-50 amino acids with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Vector, rAAV, recombinant adeno-associated viral vector, anti-angiogenesis, PEDF; angiogenesis, eye disorder; blindness, retinal degeneration, macular degeneration, neovascularisation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                   Length 184;
                                                                                                                                                                                                                                                                                                                                                                                 Score 68; DB 5; Lengtn 10-
Pred. No. 0.0007;
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                                                                                                                                                              Disclosure; Fig 1; 24pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                      100.08;
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                                                                                                                                                                                                                                                                                                                                                                                                                             100.08;
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(UYJO ) UNIV JOHNS HOPKINS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Murine endostatin protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-779243/73.
                           WPI; 2002-698655/75
                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                               Sequence 184 AA;
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11-MAR-2004

ABU64290;

RESULT 12 ABU64290

Matches

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02-OCT-2003

Мив вр.

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Gaps

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Indels

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Length 191;

Murine; endostatin; fusion protein; nucleotide-binding domain; NBD; ligand-binding domain; LBD; transcription regulating domain; TRD; cancer; zinc finger protein; ZFP; ligand-activated transcriptional regulator; gene regulation; gene therapy; cell proliferative disorder; psoriasis; pemphigus vulgaris; Behcet's syndrome; lipid histiocytosis.

Murine endostatin fused to N-terminal secretion signal.

31-JUL-2001 (first entry)

AAE02031;

AAE02031 standard; protein; 207 AA.

RESULT 15

AAE0203

8

76 VPIVNLKDEVLSPS

셤 ð

1 VPIVNLKDEVLSPS 14

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Mouse; immunoconjugate; anti-vascular endothelial growth factor antibody; anti-vEGF antibody; monoclonal antibody 203 ATC PTA 1595; VEGF receptor; VEGFR2; KDK/FIk-1; VEGFR1; FIL-1; angiogenesis; macular degeneration; ocular neovascular disease; cancer; vascularised solid tumour; AIDS; metastatic tumour; endothelial cell proliferation; inflammatory disorder; atheroselersis; diabetic retinopathy; corneal graft rejection; acquired immune deficiency syndrome; infection; restenosis; fungal ulcer; sickle cell anaemia; endometriosis; endostatin.
                                                          Amino acid sequence for mouse endostatin.
AAU77950 standard; protein; 191 AA.
                                                                                                                                                                                                                              12-OCT-2001; 2001AU-00079401
                                                                                                                                                                                                                                                 28-APR-2000; 2000AU-00048049
                                      (first entry)
                                                                                                                                                                                                                                                                    (TEXA ) UNIV TEXAS SYSTEM
                                                                                                                                                                                                                                                                                      Thorpe PE, Brekken RA;
                                                                                                                                                                                                                                                                                                          WPI; 2002-281368/33.
N-PSDB; ABK47719.
                                                                                                                                                                                      AU200179401-A.
                                     02-JUL-2002
                                                                                                                                                                                                          06-DEC-2001
                   AAU77950;
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The present invention relates to antibody-based compositions comprising an immunoconjugate such as anti-vascular endothelial growth factor (VEGF) antibody (Ab) (or its antigen-binding fragment), attached to a biological agent, where the Ab binds to the same epitope as the monoclonal antibody (MAD) 2C3 ATC PTA 1595, and significantly inhibits VEGF binding to the VEGF receptor VEGFR2 (KDK/Plk-1) without inhibiting VEGF binding to the VEGF receptor VEGFR2 (KDK/Plk-1) without inhibiting vEGF binding to the VEGF receptor VEGFR2 (KDK/Plk-1). The compositions of the invention are useful in therapy, and diagnosis, for inhibiting angiogenesis in an inmal having ocular neovascular disease or macular degeneration, and for delivering a biological agent to a vascularised tumour. The compositions can also be used for treating cancer and subjects at risk of developing, a vascularised solid tumour, a metastatic tumour or metastases from a primary tumour. The composition is useful for specifically inhibiting the variation without significantly inhibiting the variation when the subjects at the composition is the confidence of the composition of the confidence of the composition is useful for specifically inhibiting the variation when the subjects at the confidence of the composition is useful for specifically inhibiting the variation when the confidence of the composition is useful for the confidence of the composition is useful for the confidence of the composition of the confidence of the composition is useful for confidence of the composition of the confidence of the composition is useful for confidence of the composition of the confidence of the composition of the confidence of the confidence of the composition of the confidence of the confidence of the confidence of the confidence of the composition of the confidence of the confidence of the composition of the confidence of the conf
Immunoconjugate compositions for treating cancer by inhibiting angiogenesis and for delivering a diagnostic agent to tumor, comprises anti-vascular endothelial growth factor antibody attached to a biological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  inhibiting VEGF-induced macrophage, osteoclast or chondroclast function. The compositions can be used for treating various diseases such as inflammatory disorders, atherosclerosis, diabetic retinopathy. restenosis, acquired immune deficiency syndrome (AIDS), blood borne tumours, corneal graft rejection, Crohn's disease, fungal ulcers, infections, sickle cell anaemia, and endomerriosis. The present sequence represents mouse endostatin. Endostatin may be attached or functionally associated with anti-VEGF antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 10; Page 11-12 (Sequence listing); 299pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 191 AA;
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Example 19; Page 209; 218pp; English.
                                                             Sequence 207 AA;
                                                           regulators
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Gaps

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Match 100.0%; Score 68; DB 5; Length 191; Local Similarity 100.0%; Pred. No. 0.00073; les 14; Conservative 0; Mismatches 0; Indels

Query Match

Best Loca Matches

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The invention relates to fusion protein comprising a nucleotide-binding domain (NBD), a ligand-binding domain (LBD) of an intracellular receptor (ICR) and a transcription regulating domain (TRD). NBD is a polydactyl zinc finger protein (ZFP), or a modular part of it, that interacts fusion protein functions as a ligand-activated transcriptional regulator. The fusion protein and the nucleic acid encoding it, are used to regulate gene expression, particularly in gene therapy for treating malignant cell proliferative diseases (e.g. colon cancer, prostate cancer, renal-cell carcinoma) and non-malignant cell proliferative diseases (e.g. psoriasis, penphigus vulgaris, Behcef's syndrome and lipid histiocytosis). The fusion protein and its DNA are also useful for treating diseases caused by vulgaris, in humans/plants, genetic and/or acquired diseases. The fusion protein can be designed to target any selected gene (endogenous or exogenous or exogenous or exogenous I gands. The present sequence is murine for the present sequence is murine.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        endostatin fused to an N-terminal secretion signal. The corresponding cDNA sequence was used in the construction of Left end shuttle plasmids containing regulatable transgene cassettes for evaluation of Cys2-His2 Zinc finger DNA binding domain (DBD)-Oestrogen receptor (ER) LBD
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100.0%; Score 68; DB 4; Length 207;
Best Local Similarity 100.0%; Pred. No. 0.0008;
Matches 14; Conservative 0; Mismatches 0; Indels
```

New fusion protein containing nucleotide-binding and ligand-binding domains, useful e.g. in gene therapy of cancer, provides ligand-activated control of gene expression.

Beerli R;

Barbas CF, Kadan M, 2001-308618/32. N-PSDB; AAD06108

(NOVS) NOVARTIS AG. (SCRI) SCRIPPS RES INST.

23-OCT-2000; 2000WO-EP010430 25-OCT-1999; 99US-00433042. 02-JUN-2000; 2000US-00586625.

WO200130843-A1. 03-MAY-2001.

Mus sp.

Fri Mar 11 11:21:03 2005

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1 VPIVNLKDEVLSPS 14 ||||||||||||| 92 VPIVNLKDEVLSPS 105

Search completed: March 10, 2005, 11:06:52 Job time: 72.1053 secs

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March 10, 2005, 11:07:00 ; Search time 79.0263 Seconds (without alignments) 54.260 Million cell updates/sec
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3: /cgn2_6/ptodata/2/pubpaa/NSO6_NBW_PUB.pep:*
4: /cgn2_6/ptodata/2/pubpaa/USO6_NBW_PUB.pep:*
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6: /cgn2_6/ptodata/2/pubpaa/NSO8_NBW_PUB.pep:*
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14: /cgn2_6/ptodata/2/pubpaa/USO9_PUBCOMB.pep:*
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/ptodata/2/pubpaa/US10D_PUBCOMB.pep:
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/ptodata/2/pubpaa/US11 NEW PUB.pep:*
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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1396920 segs, 329844858 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Published_Applications_AA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                      OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                             US-09-766-412-30
66
1 QPVLHLVALNTPL 13
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Maximum DB seq length: 200000000
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                                                                                                                                                                                                                                                                                                                                                            Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Searched:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	Sequence 30, Appl	Sequence 115, App	Seguence 1, Appli	Sequence 1, Appli	Sequence 1, Appli	Sequence 1, Appli	Sequence 43, Appl	Sequence 1, Appli	Sequence 1, Appli	Sequence 1, Appli	Sequence 3, Appli	Sequence 1, Appli	Sequence 3, Appli
1	DI	US-09-766-412-30	US-09-873-676-115	US-09-174-282-1	US-09-405-499-1	US-09-174-516-1	US-09-154-302-1	US-10-131-241-43	US-10-232-316-1	US-10-042-347-1	US-10-351-284-1	US-10-607-501-3	US-10-358-311-1	US-09-373-938-3
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* Query	Length	13	20	20	20	20	20	20	20	20	20	20	20	42
* Query	Match	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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Result	No.	-	7	m	4	S	9	7	œ	6	10	11	12	13

44466	Sequence 2, Appli Sequence 2, Appli Sequence 1, Appli Sequence 71, Appl Sequence 1, Appli Sequence 3, Appli	0.000	2,45	Sequence 1, Appli Sequence 52, Appli Sequence 14, Appli Sequence 11, Appli Sequence 12, Appli Sequence 12, Appli Sequence 162, Appli Sequence 162, Appli Sequence 11, Appli
US-10-131-241 US-10-292-418 US-10-920-820 US-10-036-869 US-09-998-831-	9 US-09-373-938-2 13 US-10-080-797-3 14 US-10-080-797-3 15 US-10-422-934-71 15 US-10-468-759-1 9 US-09-978-531-3	US-10-131- US-10-042- US-10-131- US-10-131- US-10-131-	14 US-10-131-241-55 9 US-09-998-831-14 14 US-10-131-241-54 14 US-10-042-347-3 14 US-10-373-561-14 9 US-09-873-66-2	13 US-10-980-73-1-1 14 US-10-980-797-1 14 US-10-131-241-52 15 US-10-135-8728-11 15 US-10-135-8728-11 17 US-10-920-820-12 15 US-10-920-820-12 16 US-10-49-609-4 17 US-10-920-820-11
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ALIGNMENTS

RESULT'1 US-09-766-412-30

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Sequence 30, Application US/09766412

Patent No. US20020103129A1

GENERAL INFORMATION:

TITLE OF INVENTION:

TITLE OF INVENTION:

ACTIVITY

TITLE OF INVENTION:

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ACTIVITY

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US-09-873-676-115
Sequence 115, Application US/09873676
; Patent No. US2002007289A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 QPVLHLVALNTPL 13
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; NAME/KEY: misc_feature
; OTHER INFORMATION: Endo-2
US-09-766-412-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
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Sequence 1, Application US/09405499

Sequence 1, Application US/09405499

Patent No. USZ0020123458A1

APPLICANT: O'Reilly, Michael

APPLICANT: Polkman, M. Judah

TITLE OF INVENTION: Endostatin Protein and Fragments Thereof

FILE REFERRNCE: 05213-0640

CURRENT APPLICATION NUMBER: US/09/405,499

CURRENT FILING DATE: 1999-09-23

NUMBER OF SEQ ID NOS: 3

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 1

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Application US/09174516A; Batent No. US20020127595A1; Batent No. US20020127595A1; Batent No. US20020127595A1; Batent No. US20020127595A1; GENERAL INFORMATION:
APPLICANT: FO.Reilly, Michael S.
APPLICANT: FO.Reilly, Michael S.
APPLICANT: FO.Reilly, Michael S.
FILE REFERENCE: 05213-0227; CURRENT APPLICATION WUMBER: US/09/174,516A; CURRENT FILING DATE: 1998-10-16; NUMBER OF SEQ ID NOS: 2; SOFTWARE: Patentin Ver. 2.0; SEQ ID NO.1
                                                                                                       Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 66; DB 9; Length 20; 100.0%; Pred. No. 0.00015; Live 0; Mismatches 0; Indels
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Pred. No. 0.00015;
                                                                                                                                           Indels
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                                                                                                     Score 66; DB 9; 1
Pred. No. 0.00015;
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                                                                                                                                           Mismatches
                                                                                      100.0%; Scc.
100.0%; Pre
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US-09-154-302-1
; Sequence 1, Application US/09154302
                                                                                Query Match
Best Local Similarity 100.v.
Best Local 3; Conservative
                                                                                                                                                                              1 OPVLHLVALNTPL 13
                                                                                                                                                                                                               7 OPVLHLVALNTPL 19
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Best Local Similarity 100.
Matches 13; Conservative
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                           ); ORGANISM: Murine
; TISSUE TYPE: Collagen
US-09-174-282-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Murinae gen. sp.
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ORGANISM: Murinae gen. sp.
           ORIGINAL SOURCE:
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US-09-174-516-1
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APPLICANT: MacDonald, Nicholas J.

APPLICANT: Sim, Kim L.
TITLE OF INVENTION: Angiogratin and Endostatin Binding Proteins and Methods of Use FILE REFERENCE: 05213-0378 (43170-25933)
CURRENT FILING DATE: 2001-06-04
PRIOR APPLICATION NUMBER: US 60/209,065
PRIOR FILING DATE: 2000-06-02
PRIOR FILING DATE: 2000-06-02
PRIOR FILING DATE: 2001-05-08
NUMBER OF SEQ ID NOS: 123
SOFTWARE: Patentin version 3.1
SEQ ID NO 115
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                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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Best Local Similarity 100.0%; Pred. No. 0.00015;
Matches 13; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compartible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/174,282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/740,168
FILING DATE: 22-0CT-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Warren, William L.
REGISTRATION NUMBER: 36,714
REFRENCE/DOCKET NUMBER: 0521
TELECOMMUNICATION INFORMATION:
TELEPHONE: 404-818-3700
TELEFAX: 404-818-3799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 20 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                       1 QPVLHLVALNTPL 13
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MOLECULE TYPE: protein
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: internal
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                                                                                                                                                                                                                                                                                      ; ORGANISM: mammalian
US-09-873-676-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Georgia
: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
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Gaps
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Publication No. US20030087393A1
GENERAL INFORMATION:
APPLICANT: O'Reilly, Michael
Folkman, M. Judah
TITLE OF INVENTION: Therapeutic Antiangiogenic Compositions
and Methods
                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                             Query Match
Best Local Similarity 100.0%; Pred. No. 0.00015;
Matches 13; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/232,316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 66; DB 14; 100.0%; Pred. No. 0.00015;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 03-Sep-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/740,168A
APPLICATION NUMBER: US/08/740,168A
ATTORNEY/AGENT INFORMATION:
RAGISTATION WINBER: 36,714
REFERENCE/DOCKET NUMBER: 36,714
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Jones & Askew, LLP
STREET: 191 Peachtree, 37th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Murine
TISSUE TYPE: Collagen
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
PRIOR APPLICATION NUMBER: US 60/086,586
PRIOR FILING DATE: 1998-05-22
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
SEQ ID NO 43
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: 404-818-3700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 20 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 404-818-3799
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 30303
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FRAGMENT TYPE: internal
                                                                                                                                                                                                                                                                                                                          1 OPVLHLVALNTPL 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: Georgia
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Atlanta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGINAL SOURCE:
                                                                                                                                             ; ORGANISM: Murinae sp. US-10-131-241-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
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US-10-232-316-1
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Publication No. US20030012792A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Holaday, John W.
APPLICANT: Fortier, Anne H.
TITLE OF INVENTION: Compositions and Methods for Inhibiting Endothelial Cell Prolifer
TITLE OF INVENTION: and Regulating Angiogenesis Using Cancer Markers
FILE REFERENCE: 05213-0344 43170-271565
CURRENT APPLICATION NUMBER: US/10/131,241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                 GENERAL INFORMATION:
APPLICANT: O'Reilly, Michael
APPLICANT: Folkman, M. Judah
TITLE OF INVENTION: Therapeutic Antiangiogenic Compositions
TITLE OF INVENTION: and Methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 20;
                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/154,302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 66; DB 9; 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Warren, William L.
REGISTRATION NUMBER: 36,714
REFERENCE/DOCKET NUMBER: 05213-0223
TELECOMMUNICATION INFORMATION:
TELEPHONE: 404-818-3799
TELEFAX: 404-818-3799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 09/413,049
PRIOR FILING DATE: 1999-10-06
PRIOR APPLICATION NUMBER: US 09/316,802
PRIOR FILING DATE: 1999-05-21
                                                                                                                                  CITY: Atlanta STATE: General Actions STREET: 191 Peachtree, 37th Floor STATE: General
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/740,168
FILING DATE: 22-OCT-1996
ATTORNEY/AGENT INFORMATION:
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Best Local Similarity 100.
Matches 13, Conservative
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                                                                                                                       NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Jones & A
                                                                                                                                                                                                                                                   COUNTRY: USA
ZIP: 30303
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
  Patent No. US20020155987A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ANTI-SENSE: NO
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Sequence 3, Application US/10607501
; Bublication No. US20040091465A1
; Bublication No. US20040091465A1
; GENERAL INFORMATION:
    APPLICANT: Yim, Zachary
; TITLE OF INVENTION: Therapeutic Antiangiogenic Compositions and Methods
; FILE REFERENCE: 05213-0791 (43170-286879)
; CURRENT APPLICATION NUMBER: US/10/607,501
; CURRENT FILING DATE: 2002-06-26
; RIOR APPLICATION NUMBER: US 60/391,630
; PRIOR PILING DATE: 2002-06-26
; NUMBER OF SEQ ID NOS: 3
; SEQ ID NO 3
; LENGTH: 20
                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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; Bublication No. US20040102372A1
; Bublication No. US20040102372A1
; GENERAL INFORMATION:
   APPLICANT: O'Reilly, Michael S.
   APPLICANT: Folkman, M. Judah
; TITLE OF INVENTION: Methods of Detecting Endostatin Protein
; TITLE OF INVENTION: Methods of Detecting Endostatin Protein
; FILE REFERENCE: 05213-0320 (43170-282919)
; CURRENT FILING DATE: 2003-02-04
; PRIOR PELLING DATE: 1995-10-23
; PRIOR PELLING DATE: 1995-10-23
; PRIOR PILING DATE: 1996-09-17
; PRIOR FILING DATE: 1998-10-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
                                                       Length 20;
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100.0%; Pred. No. 0.00015;
tive 0; Mismatches 0;
                                                 100.0%; Score 66; DB 15;
100.0%; Pred. No. 0.00015;
iive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7 QPVLHLVALNTPL 19
                                                                                                                                                                         1 OPVLHLVALNTPL 13
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Best Local Similarity 100.
Matches 13; Conservative
                                                                                                               13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT; ORGANISM: Murinae gen. sp. US-10-607-501-3
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                                                       Query Match
Best Local Similarity
Matches 13; Conserv
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US-10-358-311-1
US-10-351-284-1
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Sequence 1, Application US/10042347

Publication No. US20030114370A1

Sequence 1, Application No. US20030114370A1

Septication No. US20030114370A1

APPLICANT: ProcMANTION:
TITLE OF INVENTION: Wicheel S.

TITLE OF INVENTION: Thereof (43170-249874)

FILE REFERENCE: 05213-0880 (43170-249874)

CURRENT PELICATION NUMBER: US/11/0/042,347

CURRENT PELICATION NUMBER: US 09/315,689

PRIOR APPLICATION NUMBER: US 06/106,343

PRIOR APPLICATION NUMBER: US 06/106,343

PRIOR FILING DATE: 1998-09-16

PRIOR FILING DATE: 1998-09-16

PRIOR FILING DATE: 1996-10-23

PRIOR PLILING DATE: 1996-10-23

PRIOR PLILING DATE: 1996-10-23

PRIOR FILING DATE: 1996-08-05

PRIOR PLILING DATE: 1996-08-05

PRIOR FILING DATE: 1996-08-05

PRIOR FILING DATE: 1996-08-05

PRIOR FILING DATE: 1996-08-05

PRIOR FILING DATE: 1996-09-17

NUMBER OF SEQ ID NOS: 6

SOFTWARK PLANCE DATE: 1996-09-17

NUMBER OF SEQ ID NOS: 6

SOFTWARK PATELLY PRIOR NOSE: 6

SOFTWARK PATELLY PATER NOSE: 6

SOFTWARK PATER PATER NOSE: 6
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Sequence 1, Application US/10351284

Publication No. US20030219426A1

GENERAL INFORMATION

APPLICANT: O'Reilly, Michael S.

APPLICANT: Polkman, M. Judah

TITLE OF INTENTION: Therapeutic Antiangiogenic Compositions and Methods

TITLE OF INTENTION: Therapeutic Antiangiogenic Compositions and Methods

FILE REFERENCE: US213-3051 (43170-282623)

CURRENT APPLICATION NUMBER: US 60/005,835

PRIOR APPLICATION NUMBER: US 60/005,835

PRIOR APPLICATION NUMBER: US 60/023,070

PRIOR APPLICATION NUMBER: US 60/026,263

PRIOR PILING DATE: 1996-09-17

MINARED OF OTH UNIMBER: US 60/026,263
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   Indels
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0; Mismatches
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SOFWARE: Patentin version 3.1
SEQ ID NO
LENGTH: 20
                                                                                               7 OPVLHLVALNTPL 19
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13; Conservative
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ORGANISM: Murinae gen. sp
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   Matches
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APPLICANT: Li, Yue
APPLICANT: Callies, Stephen D
TITLE OF INVENTION: Expensation and Export of Angiogenesis Inhibitors as
TITLE OF INVENTION: Immunofusins
FILE REPERENCE: LEX-006C1
CURRENT APPLICATION NUMBER: US/10/292,418
CURRENT APPLICATION NUMBER: US/10/292,418
FILM APPLICATION NUMBER: 090-091383,315
FRICH APPLICATION NUMBER: US 60/097,883
FRICH FILMG DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 54
SOFTWARE: Patentin Ver. 2.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 66; DB 14; Length 184; 100.0%; Pred. No. 0.0016; tive 0; Mismatches 0; Indels (
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Best Local Similarity 100.
Matches 13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 QPVLHLVALNTPL 13
APPLICANT: Lo, Kin-Ming
                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-292-418-18
                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 18
LENGTH: 184
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Sequence 46, Application US/10131241

Sequence 46, Application US/10131241

Publication No. US20330012792A1

SEQUENCE 46, Application US/10131241

Publication No. US20330012792A1

APPLICANT: Holaday, John W.

APPLICANT: Holaday, John W.

APPLICANT: Fortier, Anne H.

TITLE OF INVENTION: Compositions and Methods for Inhibiting Endothelial Cell Prolifer

TITLE OF INVENTION: Compositions and Methods for Inhibiting Endothelial Cell Prolifer

TITLE OF INVENTION: WUMBER: US 01/10/131,241

CURRENT APPLICATION NUMBER: US 09/413,049

FRIOR FILING DATE: 1999-10-06

FRIOR FILING DATE: 1999-10-06

FRIOR PELING DATE: 1999-05-21

FRIOR FILING DATE: 1999-05-21

FRIOR FILING DATE: 1999-05-21

FRIOR FILING DATE: 1999-05-21

FRIOR FILING DATE: 1998-05-22

NUMBER OF SEQ ID NOS: 65

SSOFTMARE: PatentIn version 3.1

LENGTH: 184
                                                                                                                                                            Sequence 3, Application US/09373938

Publication No. US20020115202A1
GENERAL INFORMATION:
APPLICANT: Hallenbeck, Paul
APPLICANT: Chen, Cheauyun Theresa
TITLE REFERENCE: 4-3089991
CURRENT PILING DATE: 1999-08-13
CURRENT PILING DATE: 1999-08-13
NUMBER OF EQUINOS: 17
SOFTWARE: Patentin version 3.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
100.0%; Score 66; DB 9; Length 42;
Best Local Similarity 100.0%; Pred. No. 0.00032;
Matches 13; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30 QPVLHLVALNTPL 42
                            OPVLHLVALNTPL 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7 OPVLHLVALNTPL 19
1 QPVLHLVALNTPL 13
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                                                                                                                   RESULT 13
US-09-373-938-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        42
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Gaps

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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March 10, 2005, 10:59:54; Search time 52.3421 Seconds (without alignments) 127.183 Million cell updates/sec Run on:

US-09-766-412-30 66 Title: Perfect score:

1 QPVLHLVALNTPL 13 Sequence: BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

1612378 seqs, 512079187 residues Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	pti	Q61434 mus musculu	Q6nzk9 mus musculu	mus	P39061 mus musculu	5 homo	9 ношо	pomod 4	1 homo	9 gallu	P39060 homo sapien	homo) homo	rattı	Q6p3m9 xenopus tro	xenc		Q9eqd9 mus musculu	rattus n	Q8qhl9 xenopus lae	Q8jff7 xenopus lae		Q8awc6 brachydanio	Q9y4w4 homo sapien			~		P32333 saccharomyc	7 xenopus	7 xenopu	Q86sc8 ciona intes
SUMMAKIES	ID	061434	Q6NZK9	Q6P1Y4	CAIH_MOUSE	QBWXIS	Q8NG19	Q8N4S4	Q6RZ41	093419	CAIH HUMAN	Q6R2 <u>3</u> 9	Q6R240	Q9QZD2	Q6P3M9	Q6DFR4	035206	Q9EQD9	Q9WUWS	овонг9	QBJFF7	909B60	QBAWC6	Q9Y4W4	CA1E_HUMAN	Q7YH34	Q9B6P8	Q9B6G9	MOT1_YEAST	Q6EKW7	Q6NRX7	Q86SC8
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Q6FRVB Q9Z1N7 ATPE RHOPD Q7Y433 Q7Y433 Q9BGG4 Q9BGH4 Q9B6H9 Q9B6H9 Q9B6H9 Q9B6H9 Q9B6H9 Q9B6H9 Q9B612
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OS-JUL-2004 (TrEMBLrel. 27, Last sequence update)
OS-JUL-2004 (TrEMBLrel. 27, Last annotation update)
OS-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Procollagen, type XVIII, alpha 1.
Name=Collaal;
Name=Collaal;
Buts musculus (Mouse).

Buts mysota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
                                                                                                                                                                                                                                                        Mus musculus (Mouse).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Rodentia, Sciurognathi; Muridae, Murinae, Mus.
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                                                                                                                                         Last sequence update)
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                                                           PRT; 1140 AA.
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                                                           PRELIMINARY;
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                                                                                                                 (TrEMBLrel. (TrEMBLrel.
                                                                                                                                                                          01-MAR-2004 (TrEMBLrel.
                                                                                                                                                                                                     Collagen (Fragment).
Name=Coll5al;
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Best Local Similarity
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                                                           061434
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060ZK9
1D 060ZZ
AC 060ZZ
DT 05-JT
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GN Name
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RESULT 1
061434:
1D Q61434:
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RECURESUB-Embryo,

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RECURE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

RECURE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

RA Altachul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Rapa Diatchenko L., Marusina K., Farmer G.J., Abramson R.D., Mullahy S.J.,

Rapa S.A., McEwan P.J., McKernan K.J., Abramson R.D., Mullahy S.J.,

Raba S.A., Morewan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

RA Chards S.A., Moriny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Pahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

Rodriguez A.C., Grimwood J., Grenner E.D., Dickson M.C.,

RA Rodriguez A.C., Grimwood J., Gramius D.E., Schnerch A., Schein J.E.,

RA Jesseley R.M., Touchman J.W., Green E.D., Myers R.M.,

RODRS S.J., Marra M.A.,

RA Touchman A.W., Green E.D., Myers R.M., Butterfield Y.S.,

RA Jones S.J., Marra M.A.,

RA Jones S.J., Marra M.A.,

RA Jones S.J., Marra M.A.,

RA Jeseley R.M., Touchman M.A.,

RA Jeseley R.M., Touc
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Straubbr
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P39061, Q66021, Q64037, Q62001, Q62002; Q9JK63;
01-FEB-1995 (Rel. 31, Created)
10-OCT-2003 (Rel. 42, Last sequence update)
25-OCT-2004 (Rel. 45, Last annotation update)
Collagen alpha 1(XVIII) chain precursor [Contains: Endostatin].
Name=Collagen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 66; DB 2; Length 1315; 100.0%; Pred. No. 0.0062; ive 0; Mismatches 0; Indels 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1138 QPVLHLVALNTPL 1150
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        SEQUENCE FROM N.A.
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Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.

Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.

R GO; GO:0005604; Cabasement membrane; IDA.

R GO; GO:0005615; C:extracellular space; TAS.

R GO; GO:000186; P:endothelial cell morphogenesis; IDA.

R GO; GO:00186; P:endothelial cell morphogenesis; IDA.

R GO; GO:00186; P:endothelial cell morphogenesis; IDA.

R GO; GO:001886; P:endothelial cell morphogenesis; IDA.

R GO; GO:008384; P:positive regulation of cell migration; IDA.

R GO; GO:008384; P:positive regulation of cell proliferation; IDA.

R InterPro; IPR008895; Conl. alke lec_gl.

R InterPro; IPR008985; Conl. alke lec_gl.

R InterPro; IPR008985; Conl. alke lec_gl.

R InterPro; IPR01891; Collagen; TSP.

R ProDom: PR008007; Clg helix; 2.

R ProDom: PR008007; Clg helix; 2.

R PRDOM: PR00807; Clg helix; 2.

R PRDOM: PR00807; Clg helix; 2.
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05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Name-Collsan;
Name-Collsan;
Mus musculus (Mouse).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; Musil
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1315 AA; 134245 MW; 15C862C1E385F03A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                  SEQUENCE FROM N.A.
STRAIN=C57BL/6; TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. STRAIN=C57BL/6; TISSUE=Brain;
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NCBI_TaxID=10090;
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SEQUENCE
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Q6P1Y4;
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Event=Alternative splicing; Named isoforms=3;
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InterPro; IPR008160; Conlagen.
InterPro; IPR008985; Cona like_lec_gl.
InterPro; IPR010363; DUF959.
InterPro; IPR010515; Endostatin.
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EMBL, U34609, AACS2903.1; JOINED.
EMBL, U34610, AACS2903.1; JOINED.
EMBL, U34611, AACS2903.1; JOINED.
EMBL; U34612, AACS2903.1; JOINED.
EMBL; U34613, AACS2903.1; JOINED.
EMBL; U11636, AACS2179.1; ---
EMBL; U11637, AACS2179.1; ---
EMBL; L22545; AAA19787.1; ---
EMBL; AF257775; AAF69009.1; ---
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AAC52903.1; J
AAC52903.1;
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AAC52901.1;
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U03718; 2
U34607; 2
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U34611;
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EMBL;
EMBL;
Rehn M., Pihlajaniemi T.;
"Identification of three N-terminal ends of type XVIII collagen chains and tissue-specific differences in the expression of the corresponding transcripts. The longest form contains a novel motif homologous to rat and Drosophila frizzled proteins.";
J. Biol. Chem. 270:4705-4711(1995).
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MEDLINE-94240111; PubMed=8183893;
MEDLINE-94240111; PubMed=8183893;
Ob S.P., Kamagata Y., Muragaki Y., Timmons S., Ooshima A., Olsen B.R.;
"Isolation and sequencing of cDNAs for proteins with multiple domains of Gly-Xaa-Yaa repeats identify a distinct family of collagenous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   οŧ
                   Rehn M.V., Hintikka E., Pihlajaniemi T.;
"Primary structure of the alpha 1 chain of mouse type XVIII collagen, partial structure of the corresponding gene, and comparison of the alpha 1(XVIII) chain with its homologue, the alpha 1(XV) collagen chain ":
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MEDLINE=98169382; PubMed=9501087; DOI=10.1093/emboj/17.6.1656;
Hohenester E., Sasaki T., Olsen B.R., Timpl R.;
"Crystal structure of the angiogenesis inhibitor endostatin at 1.5-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rehn M.V., Pihlajaniemi T.; "Alpha 1(XVIII), a collagen chain with frequent interruptions in the collagenous sequence, a distinct tissue distribution, and homology with type XV collagen.";
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MEDLINE=97160848; PubMed=9008168; DOI=10.1016/S0092-8674(00)81848-6;
O'Reilly M.S., Boehm T., Shing Y., Fukai N., Vasios G., Lane W.S.,
Flynn E., Birkhead J.R., Olsen B.R., Folkman J.;
"Endostatin: an endogenous inhibitor of angiogenesis and tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             resolution.",
EMBO J. 17.1656-1664(1998).
--- FUNCTION: Endostatin potently inhibits endothelial cell
proliferation and anglogenesis. May inhibit anglogenesis by
binding to the heparan sulfate proteoglycans involved in growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Event=Alternative promoter;
Comment=2 isoforms, 1 (shown here) and 3, are produced by use
alternative promoters;
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MEDLINE=21217748; PubMed=11321448;
Jia S., Zhu F., Li H., He F., Xiu R.-J.;
"Anticancer treatment of endostatin gene therapy by targeting tumor neovaeculature in C57/BL mice.";
Clin. Hemorheol. Microcirc. 23:251-257(2000).
                                                                                                                                                                                                        SEQUENCE FROM N.A. (ISOFORMS 1; 2 AND 3).
MEDLINE=56435922; PubMed=8838808; DOI=10.1006/geno.1996.0139;
Rehn M., Hintikka E., Pihlajaniemi T.;
Rcharacterization of the mouse gene for the alpha-1 chain of type
XVIII collagen (COL18A1) reveals that the three variant N-terminal
polypeptide forms are transcribed from two widely separated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=95181468; PubMed=7876242; DOI=10.1074/jbc.270.9.4705;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Proc. Natl. Acad. Sci. U.S.A. 91:4234-4238(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      proteins.";
Proc. Natl. Acad. Sci. U.S.A. 91:4229-4233(1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 1-1387 FROM N.A. (ISOFORM 3) MEDLINE=94240112; PubMed=8183894;
                                                                                                                                                         Biol. Chem. 269:13929-13935(1994)
  MEDLINE=94245707; PubMed=8188673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 487-1774 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                Genomics 32:436-446(1996).
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proteins.'

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                                                                                                                                                                                                                                                                                                                                                                           -!- PTM: Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.
-!- SIMILARITY: Belongs to the fibril-associated collagens with interrupted helices (FACIT) family.
-!- SIMILARITY: Contains 1 frizzled (FZ) domain.
Name=1; Synonyms=NC1-764;
IsoId=P39061-3; Sequence=Displayed;
Name=2; Synonyms=Long, NC1-517;
IsoId=P39061-1; Sequence=VSP 008303;
Note=Produced by alternative=splicing of isoform 1;
Name=3; Synonyms=Short, NC1-301;
IsoId=P39061-2; Sequence=VSP 001157, VSP 001158;
-!- TISSUE SPECIFICITY: Expressed in liver, kidney, lung, skeletal muscle and testis.
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PDB; IDYO; X-ray; A=1340-1527.

PDB; IDXI; X-ray; A=1340-1527.

PDB; IKOE; X-ray; @=1350-1521.

MOP; MGI:88451; Coll8a1.

GO; GO:0005604; C:basement membrane; ID

GO; GO:0001555; P:angiogenesis; IMP.
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Kringle.
SEQUENCE
                                                                                                                                                                                                                                                                      Query Match
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Q8N4S4;
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"Inhibition effect in vitro of purified endostatin expressed in Pichia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
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Triple-helical region 2 (NC2).
Nonhelical region 2 (NC2).
Triple-helical region 3 (NC3).
Triple-helical region 3 (COL3).
Nonhelical region 4 (COL4).
Triple-helical region 4 (COL4).
Triple-helical region 5 (NC5).
Triple-helical region 5 (NC5).
Nonhelical region 5 (NC5).
Triple-helical region 6 (NC5).
Triple-helical region 6 (NC5).
Triple-helical region 6 (NC5).
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Triple-helical region 6 (CCL6).

Triple-helical region 7 (NC7).

Nonhelical region 7 (CCL7).

Triple-helical region 8 (CCL8).

Triple-helical region 9 (CCL8).

Triple-helical region 9 (TCH8).

Triple-helical region 9 (TCH8).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Potential.
Collagen alpha 1(XVIII) chain.
Endostatin.
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Feng Y., Wu Y., Zhu X., Liu C.X., Ma Q.J.;
Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
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QBWXI5;
01-MAR-2002 (TrEMBLrel. 20, Created)
01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Collagen XVIII (Fragment).
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InterPro; IPR00024; Fz domain.
InterPro; IPR001791; Laminin_G.
InterPro; IPR001191; Laminin_G.
InterPro; IPR003129; TSP N.
Pfam; PF01391; COllagen; 8.
Pfam; PF0482; Endostatin; 1.
Pfam; PF0482; Endostatin; 1.
Pfam; PF01392; Fz; 1.
ProDom; PF00210; TSP N; 1.
SWART; SW00063; FRI; 1.
SWART; SW00210; TSPN; 1.
SWART; SW00210; TSPN; 1.
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Best Local Similarity 100.
Matches 13; Conservative
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01-0CT-2002 (TrEMBLrel. 22, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Multi-functional protein MFP.
Homo sepiens (Human).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
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Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
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Pred. No. 0.0062;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                               Length 187;
                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
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Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
BMBL; AF282883; AAM52249.1; -.
HSSP; P39060; IBNL.
InterPro; IPR010515; Endostatin.
InterPro; IPR000001; Kringle.
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Strausberg R.;
Strausberg R.;
Submitted (JUL-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BCO33715; AAH33715.1; --
                                                                                                                                          Collagen.
1 1 1
SEQUENCE 187 AA; 20448 MW; 72B1047DB5838CD3 CRC64;
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01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Similar to collagen, type XVIII, alpha 1 (Fragment)
                                                                                                                                                                                                                                                                                                                          Score 62; DB 2;
Pred. No. 0.0043;
1; Mismatches (
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GO; GO:0006817; P:phosphate transport; IEA.
InterPro; IPR008161; Clg helix.
InterPro; IPR008160; Collagen.
EMBL, AF416592, AAL37720.1; -. HSSP; P39060; 1BNL. Pfam; PF06482; Endostatin; 1.
                                                                                                                                                                                                                                                                                                                                    93.9%;
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ProDom; PD000395; Kringle; 1.
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Best Local Similarity 92.3%,
The state of the
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Matches 12; Conservative
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SEQUENCE FROM N.A.
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MEDLINE=98411346; PubMed=9738008; DOI=10.1074/jbc.273.39.25404;
Halfter W., Dong S., Schurer B., Cole G.J.;
"Collagen XVIII is a basement membrane heparan sulfate proteoglycan.";
J. Biol. Chem. 273:25404-28412(1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINB=20289799; PubMed=10830953; DOI=10.1038/35012518;
Hattori M., Fujiyama A., Taylor T.D., Watanabe H., Yada T.,
Park H.-S., Toyoda A., Ishii K., Totoki Y., Choi D.-K., Soeda E.,
Ohki M., Takagi T., Sakaki Y., Taudien S., Blechschmidt K., Polley A.,
                                                                         Eukaryoča, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Archosauria, Aves, Neognathae, Galliformes, Phasianidae, Phasianinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A., AND VARIANT ILE-841.
MEDILTRE=98146096; PubMed=9503385; DOC=10.1016/S0945-053X(98) 90003-8; Saarela J. Ylikarppa R., Rehn M., Purmonen S., Pihlajaniemi T.; Complete primary structure of two variant forms of human type XVIII collagen and tissue-specific differences in the expression of the Matrix Biol. 16:1919-128 (1998).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Halfter W. Dong S.;
Submitted (AUG-2001) to the EMBL/GenBank/DDBJ databases.
R Submitted (AUG-2001) to the EMBL/GenBank/DDBJ databases.
R EMBL, AR033294.2;
R GO; GO:0005737; C:cytoplasm; IEA.
GO; GO:0005139; F:structural molecule activity; IEA.
GO; GO:0006819; F:structural molecule activity; IEA.
GO; GO:0006819; F:structural molecule activity; IEA.
R GO; GO:0006819; P:phosphate transport; IEA.
R InterPro; IPR008161; C1g helix.
R InterPro; IPR008161; C1g helix.
R InterPro; IPR008161; C1g helix.
R InterPro; IPR001395; Collagen.
R InterPro; IPR001391; Collagen.
R InterPro; IPR00131; C1aminin_G.
R InterPro; IPR00131; C1aminin_G.
R Pfam; PF04131; C11aqen.
R Pfam; PF04131; C11aqen.
R SMART; SM00282; Landstatin; 1.
R SMART; SM00282; Land; 1.
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SEQUENCE 1344 AA; 137402 MW; 7AA366E4FB940CCD CRC64;
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1167 QPALHLVALNTPL 1179
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                                        Gallus gallus (Chicken).
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SIGNAL 1
                                                                                                                                                          Gallus.
NCBL_TaxID=9031;
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MEDLINE=22980396; PubMed=14614989; DOI=10.1016/S0945-053X(03)00073-8; Blamma H., Snellman A., Rehn M., Autio-Harmainen H., Pihlajanlemi T.; "Characterization of the human type XVIII collagen gene and proteclytic processing and tissue location of the variant containing a frizzled motif.";
                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Type XVIII collagen short variant.
Home aspiens (Human)
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
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                                                                                                                                                                                                                                                                                                         93.9%; Score 62; DB 2; Length 816; 92.3%; Pred. No. 0.02;
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BMBL; AY484967; AAR83298.1; JOINED.

EMBL; AY484967; AAR83298.1; JOINED.

EMBL; AY484979; AAR83298.1; JOINED.

EMBL; AY484971; AAR83298.1; JOINED.

EMBL; AY484971; AAR83298.1; JOINED.

EMBL; AY484977; C:CYtOplasm; IEA.

GO; GO:0005198; F:serructural molecule activity; IEA.

GO; GO:0005198; F:serructural molecule activity; IEA.

GO; GO:0006817; P:phosphate transport; IEA.

InterPro; IPR008160; Collagen.

InterPro; IPR008160; Collagen.

InterPro; IPR008160; Collagen.

InterPro; IPR008185; Endostatin.

InterPro; IPR019129; TSP.N.

Pfam; PP06482; Endostatin; 1.
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SEQÜENCE 816 AA; 82553 MW; 5D539B2946694F86 CRC64;
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Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                       1; Mismatches
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InterPro; IPR010515; Endostatin.
                            Pfam; PF01391; Collagen; 5.
Pfam; PF06482; Endostatin; 1.
ProDom; PD000007; Clg_helix; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProDom; PD000007; Clg_helix; 1.
SMART; SM00210; TSPN; 1.
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nes 12; Conservative
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01-OCT-2001 (
01-MAR-2004 (
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SEQUENCE
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Q6RZ41,
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RESULT 8
QGRZ41
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RESULT 9 093419 ID 0934: AC 0934: DT 01-N DT 01-O DT 01-O

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Gaps

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Menzel U., Delabar J., Kumpf K., Lehmann R., Patterson D.,
Reichwald K., Rump A., Schillhabel M., Schudy A., Zimmermann W.,
Rosenthal A., Kudoh J., Shibuya K., Kawasaki K., Aagkwa S.,
Shintani A., Sasaki T., Magamine K., Mitsuyama S., Antonarakis S.E.,
Minoshima S., Shimizu N., Nordsiek G., Hornischer K., Brandt P.,
Scharfe M., Schoen O., Desario A., Reichelt J., Kauer G., Bloecker H.,
Ramser J., Beck A., Klages S., Hennig S., Riesselmann L., Dagand E.,
Wehrmeyer S., Borzym K., Gardiner K., Nizetic D., Francis F.,
The DNA sequence of human chromosome 21.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Name=Short; Synonyms=NGI-303;
IsoId=P39060-2; Sequence=VSP_001155, VSP_001156;
IsoId=P39060-2; Sequence=VSP_001155, VSP_001156;
In liver, lung and kidney.
-!- FTM: Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.
-!- POLYMORPHISM: There is an association between a polymorphism in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VARIANTS LEU-49; ARG-111; ILE-841 AND ARG-886, AND CHARACTERIZATION OF VARIANT ASN-1437.

VARIANT ASN-1437.

PubMed=14695535; DOI=10.1002/humu.10284;

Menzel O., Bekkeheien R.C.J., Reymond A., Fukai N., Boye E.,

Kosztolanyi G., Aftimos S., Deutsch S., Scott H.S., Olsen B.R.,

Antonarakis S.E., Guipponi M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VARIANTS ILE-841 AND ASN-1437.
MEDLINE=21518361; PubMed=11606364;
Iughetti P., Suzuki O., Godoi P.H., Alves V.A., Sertie A.L.,
Zorick T., Soares F., Camargo A.A., Moreira E.S., di Loreto C.,
Moreira-Filho C.A., Simpson A., Oliva G., Passos-Bueno M.R.;
"A polymorphism in endostatin, an angiogenesis inhibitor, predisposes for the development of prostatic adenocarcinoma.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Collagen XVIII, containing an endogenous inhibitor of angiogenesis and tumor growth, plays a critical role in the maintenance of retinal structure and in neural tube closure.";
Hum. Mol. Genet. 9:2051-2058(2000).
                                                                                                                                                                                                                                                                        SEQUENCE OF 834-1516 FROM N.A., AND VARIANT ARG-886.
MEDLINE=94245237; PubMed=8188291;
Oh S.P., Warman M.L., Seldin M.F., Cheng S., Knoll J.H., Timmons S.,
Olsen B.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Knobloch syndrome: novel mutations in COL18A1, evidence for genetic heterogeneity, and a functionally impaired polymorphism in
                                                                                                                                                                                                                                                                                                                                                               "Cloning of cDNA and genomic DNA encoding human type XVIII collagen and localization of the alpha 1(XVIII) collagen gene to mouse chromosome 10 and human chromosome 21.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           endostatin.";

Hum. Mutat. 23:77-84(2004).

Hum. Mutat. 23:77-84(2004).

-!- FUNCTION: COLA18A probably plays a major role in determining the retinal structures well as in the closure of the neural tube.

-!- FUNCTION: Endostatin potently inhibits endothelial cell proliferation and angiogenesis. May inhibit angiogenesis by binding to the heparan sulfate proteoglycans involved in growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Zhi-Yong H., Biao L., Wei-Jie Z., Xiang-Pu W.; "Cloning and expression of human endostatin gene in Escherichia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INVOLVEMENT IN KNOBLOCH SYNDROME.
MEDLINE=20600145; PubMed=10942434; DOI=10.1093/hmg/9.13.2051;
Sertie A.L., Sossi V., Camargo A.A., Zatz M., Brahe C.,
Passos-Bueno M.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Event=Alternative splicing; Named isoforms=2;
Name=Long; Synonyms=NC-493;
IsoId=P39060-1; Sequence-Displayed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 1334-1516 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Genomics 19:494-499(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    factor signaling.
ALTERNATIVE PRODUCTS:
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lsb-sib.ch).
position 1437 and prostate cancer. Heterozygous Asn-1437 individuals have a 2.5 times increased chance of developing prostate cancer as compared with homosygous Asp-1437 individuals.

-!- DISEASE. Defects in COL1841 are a cause of Knobloch syndrome (KNO) [MIN:26750]; an autosomal recessive disorder defined by the occurrence of high myopia, vitreoretinal degeneration with retinal detachment, macular abnormalities and occipital encephalocele.
-!- SIMILARITY: Belongs to the fibril-associated collagens with interrupted helices (FACIT) family.
-!- SIMILARITY: Contains 1 TSP N-terminal (TSPN) domain.
                                                                                                                                                                                                                                                                                                                                                                                                            Mily 267750; -.

R GO; GO:0005281; C:collagen; TAS.

R GO; GO:0008285; P:negative regulation of cell proliferation; TAS.

R GO; GO:000887; P:organogenesis; TAS.

R GO; GO:0007601; P:visual perception; TAS.

R GO; GO:0007601; P:visual perception; TAS.

R InterPro; IPR008160; Collagen.

R InterPro; IPR008160; Collagen.

R InterPro; IPR001791; Laminin_G.

R InterPro; IPR001791; Laminin_G.

R InterPro; IPR001791; Laminin_G.

R Pfam; PF00121; DIPS59; I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Collagen alpha 1(XVIII) chain.
Endostatin.
TSP N-terminal.
Nonhelical region 1 (N1).
Triple-helical region 2 (N2).
Triple-helical region 2 (N2).
Triple-helical region 3 (N2).
Triple-helical region 3 (COL2).
Nonhelical region 4 (N4).
Triple-helical region 5 (NC1).
Triple-helical region 5 (NC2).
Triple-helical region 6 (NC6).
Triple-helical region 6 (NC6).
Triple-helical region 6 (NC6).
Triple-helical region 6 (COL6).
Nonhelical region 6 (COL6).
Triple-helical region 9 (COL9).
Triple-helical region 9 (COL9).
Triple-helical region 9 (NC9).
Triple-helical region 9 (NC1).
Triple-helical region 9 (NC10).
Triple-helical region 10 (NC10).
Triple-helical region 10 (NC10).
Triple-helical region 10 (NC10).
Triple-helical region 10 (NC110).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3D-structure; Alternative splicing; Cell adhesion; Collagen;
Extracellular matrix; Glycoprotein; Hydroxylation; Polymorphism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nonhelical region 11 (NC11).
N-linked (GlcNAc. .) (Potential)
                                                                                                                                                                                                                                                                             EMBL, AF018081, AAC39658.1; -.
EMBL, AF018082, AAC39659.1; -.
EMBL, ALG3302, CAB30482.1; -.
EMBL, 122548; AAA51864.1; -.
EMBL, AF184060, AAF01310.1; ALT_INIT.
GlycosultedB, F39060; -.
Genew, HGNC:2195; COL18A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Structural protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam; PF06482; Endostatin; 1. Pfam; PF02210; TSP N; 1. Probom; PD0000007; Člg helix; 1. SMART; SM00210; TCPN
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1516
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SIGNAL 1
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MEDLINE=22980396; PubMed=14614989; DOI=10.1016/S0945-053X(03)00073-8; Blamma H., Shellman A., Rehn M., Autio-Harmainen H., Pihlajaniemi T.; "Characterization of the human type XVIII collagen gene and proteolytic processing and tissue location of the variant containing a frizzled motif.";
                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
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                                                                                                                                                                      Score 62; DB 2; Length 1516;
Pred. No. 0.039;
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RemBL; AY484969; AAR83296.1; JOINED.

RemBL; AY484969; AAR83296.1; JOINED.

RemBL; AY484970; AAR83296.1; JOINED.

RemBL; AY484971; AAR83296.1; Jevelooffer receptor activity; IEA.

Reps. Remonstrate and adhesion; IEA.

Remained to the complete and activity; IEA.

Reps. Remonstrate and adhesion; IEA.

Remained to the complete and activity; IEA.

Remained to the complete an
                                                                                                                             1516 AA; 153779 MW; 38D0F23D3FD758A4 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Type XVIII collagen long variant.
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Pred. No. 0.045;
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                                                                                                                                                                                                               1; Mismatches
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Pfam; PF01392; Fz; 1.
ProDom; PD00007; Clg.helix; 1.
SMART; SM0063; FRI; 1.
SMART; SM00210; TSPN; 1.
                         Pfam; PP06121; DUP955; 1.
Pfam; PP06482; Endostatin; 1.
ProDom; PD000007; Clg helix; 1.
SMART; SM00210; TSPN; 1.
                                                                                                                                                                      93.9%;
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92.3%;
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                                                                                                                                                         Query Match
Best Local Similarity 92.33
Warches 12; Conservative
                                                                                                                                                                                                                                                     1 OPVLHLVALNTPL 13
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SEQUENCE
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Q6RZ40;
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Q6RZ40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      heterozygotes may cause Knobloch syndrome when in combination with a frameshift/truncating mutation).
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MEDLINE=22980396; PubMed=14614989; DOI=10.1016/S0945-053X(03)00073-8; Blamaa H., Snellman A., Rehn M., Autio-Harmainen H., Pihlajaniemi T.; "Characterization of the human type XVIII collagen gene and proteolytic processing and tissue location of the variant containing frizzled motif.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                            D -> N (decreased activity for binding laminin; increased risk of developing prostate cancer; in compound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Type XVIII collagen middle variant.

Homo sapiens (Human).

Eukarycia, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                          HTTEAGTLPÄPTPSPPSLGRPWAPLTGPSVPPPSS
PRCPWPWPRRRRLLDVLAPLVLLLGVRAASAEP (1
                         (Potential).
(Potential).
N-linked (GlcNAc. ..) (Potential).
N-linked (GlcNAc. ..) (Potential).
N-linked (GlcNAc. ..) (Potential).
O-linked (GalNAc. ..).
/FTId=CAR 00150.
By similarity.
By similarity.
Cell atteachment site (Potential).
Missing (in isoform Short).
/FTId=VSP_001155.
      (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 62; DB 1; Length 1516;
Pred. No. 0.039;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-UUL-2004 (TrEMBLrel. 27, Created)
05-UUL-2004 (TrEMBLrel. 27, Last sequence update)
05-UUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                            Q -> L.
/FTId=VAR_018053.
                                                                                                                                                                                                                                                                                                                                                       FTId=VAR_018054.
                                                                                                                                                                                                                                                     isoform Short).
/FTId=VSP_001156.
                                                                                                                                                                                                                                                                                                                                                                                                  FTIG=VAR_018055.
                                                                                                                                                                                                                                                                                                                                                                                                                       ? -> R. _ _ /FTId=VAR 018056.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT; 1516 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 OPVLHLVALNTPL 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
    129
164
691
1329
                                                                                                     1506
1498
1097
180
                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                     886
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9606;
                                             691
1329
                                                                                                       1366
1468
1095
                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                     886
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1437
                     CARBOHYD
                                                                                                     DISULFID
                                                              CARBOHYD
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Q6RZ39 Q6RZ39

RESULT 11

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25-OCT-2004
25-OCT-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 15
Q6DFR4
g
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                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Xenopus tropicalis (Western clawed frog) (Silurana tropicalis).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Amphibia, Batrachia, Anura, Mesobatrachia, Pipoidea, Pipidae,
                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
STRAIM-Sprague-Dawley;
MEDLINE-2027225, PubMed=10766159;
Perletti G., Concari P., Giardini R., Marras E., Piccinini F.,
Polkman J., Chen L.;
"Antitumor activity of endostatin against carcinogen-induced rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92.4%; Score 61; DB 2; Length 226; 100.0%; Pred. No. 0.0081; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   226 AA; 25350 MW; 38B83C0486C0E949 CRC64;
                                                                                                                                                         01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
1-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Collagen XVIII (Fragment)
Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Hypothetical protein MGC76284.
                                                                                         226 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT; 1301 AA
                                                                                                                                     Created)
                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         primary mammary tumors.";
Cancer Res. 60:1793-1796(2000).
EMBL; AF189709; AAF00975.1; -.
HSP: P39061; 1DX1.
InterPro; IPR010515; Endostatin.
Pfam; PF06482; Endostatin; 1.
                                                                                                                                   01-MAY-2000 (TrEMBLrel. 13,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     50 PVLHLVALNTPL 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 PVLHLVALNTPL 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Xenopodinae; Xenopus.
NCBI_TaxID=8364;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FROM N.A.
                                                                                                                                                                                                                                                                                               NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Name=MGC76284;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Collagen.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06P3M9;
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Matches
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                                                                                         SET WE REPRESENT TO THE SOLUTION OF THE SET OF THE SET OF THE SOLUTION OF THE 
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RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RX Strausberg R.L. Feingold E.A., Grouse L.H., Derge J.G.,
RIausner R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B. Buerow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Zeeberg B., Buerow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Batchenco M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Stapletcon M.J. Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
Ra Raha S.S., Loquellano N.A., Peters G.J., Abrameon R.D., Mullahy S.J.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Marzh, Sodergren B.J., Lu X., Gibbs R.A.,
Rabey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Rodriguez A.C., Grimwood J., Gromutz J., Myers R.M., Butterfield Y.S.,
Althous S.J., Marra M.A.,
Althous S.J., Marra M.A.,
Radeneration and initial analysis of more than 15,000 full-length human
Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E., Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xenopus tropicalis (Western clawed frog) (Silurana tropicalis).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                  KIEIN S., Gerhard D.S.;

KIEIN S., Gerhard D.S.;

Submitted (DEC-2003) to the EMBL/GenBank/DDBJ databases.

R EMBL; BC063929; AAH6329.1, I.

R GO; GO:0005198; F:Structural molecule activity; IEA.

GO; GO:0005198; F:Structural molecule activity; IEA.

GO; GO:0006817; P:phosphate transport; IEA.

R InterPro; IPR008161; Collagen.

R InterPro; IPR008161; Collagen.

R InterPro; IPR008985; Collagen.

R InterPro; IPR008985; Collagen.

R InterPro; IPR018129; TSP. N.

R InterPro; IPR018129; TSP. N.

R InterPro; IPR018129; TSP. N.

R Pfam; PF06482; Endostatin; 1.

R Prodom; PB000007; Clg helix; 2.

R PRAMT; SM00210; TSPN; 1.

Collagen; Hypothetical Protein.

SEQUENCE 1301 AA; 133387 MW; 238BAEEG3FAA4383 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1301;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Last sequence update)
Last annotation update)
                                                                                                               and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 61; DB 2;
Pred. No. 0.05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT; 1310 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (TrEMBLrel. 28, (TrEMBLrel. 28, (TrEMBLrel. 28,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ||||||||||||
1125 PVLHLVALNTPL 1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 PVLHLVALNTPL 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Xenopodinae; Xenopus.
                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MGC76284 protein.
Name=MGC76284;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=8364;
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| R. | Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002). | | | |
| R. | EQUENCE FROM N.A. | R. | EQUENCE FROM N.A. |
| R. | SEQUENCE FROM N.A. | R. | EACHBARK | EMBL/GenBank/DDBJ databases. |
| R. | Stubmitted (JUL-2004) to the EMBL/GenBank/DDBJ databases. |
| R. | Submitted (JUL-2004) to the EMBL/GenBank/DDBJ databases. |
| R. | Submitted (JUL-2004) to the EMBL/GenBank/DDBJ databases. |
| R. | Submitted (JUL-2004) to the EMBL/GenBank/DDBJ databases. |
| R. | Submitted (JUL-2004) to the EMBL/GenBank/DDBJ databases. |
| R. | Submitted (JUL-2004) to the EMBL/GenBank/DDBJ databases. |
| R. | GO; GO:0005198; F:structural molecule activity; IEA. |
| R. | GO; GO:0005198; F:structural molecule activity; IEA. |
| R. | InterPro; IPR008161; Claj helix. |
| R. | InterPro; IPR008161; Claj helix. |
| R. | InterPro; IPR008155; Endostatin. |
| R. | Ram; PF06483; Endostatin. |
| R. | Ram; PF06483; Endostatin. |
| R. | Ram; PF06483; Endostatin. |
| R. | SAMRT; SM00210; TSPN. |
| SQUENCE 1310 AA; 134223 MW; A369B2877758B422 CRC64; |
| SQUENCE 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0; |
| Query Match |
| R. | SAMRT; SM00210; Mismatches 0; Indels 0; Gaps 0; |
| Query Match |
| R. | SQUENCE 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0; |
| R. | SQUENCE 12; Reservative 0; Mismatches 0; Indels 0; Gaps 0; |
| R. | SQUENCE 12; Reservative 0; Mismatches 0; Indels 0; Gaps 0; |
| R. | SQUENCE 12; Reservative 0; Mismatches 0; Indels 0; Gaps 0; |
| R. | SQUENCE 12; Reservative 0; Mismatches 0; Indels 0; Gaps 0; |
| R. | SQUENCE 12; Reservative 0; Mismatches 0; Indels 0; Gaps 0; |
| R. | SQUENCE 12; Reservative 0; Mismatches 0; Indels 0; Gaps 0; |
| R. | SQUENCE 12; Reservative 0; Mismatches 0; Indels 0; |
| R. | SQUENCE 12;
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Search completed: March 10, 2005, 11:09:30 Job time : 54.3421 secs

1134 PVLHLVALNTPL 1145

g

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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OM protein - protein search, using sw model

March 10, 2005, 11:00:49 ; Search time 11.2895 Seconds
 (without alignments)
 110.795 Million cell updates/sec Run on:

US-09-766-412-30 66 Title: Perfect score:

1 QPVLHLVALNTPL 13 Sequence: BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 seqs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	collagen alpha 1(X	collagen alpha 1(X	collagen alpha 1(X	collagen alpha 1(X	MOT1 protein - yea	hypothetical prote		3-methyladenine gl	acetoin dehydrogen	NADH2 dehydrogenas	probable cytochrom	hypothetical prote				hypothetical prote	acetyl-CoA carboxy	genome polyprotein	probable membrane	BHRF1 protein - hu	probable cytochrom	transforming prote	P13 protein - phag	hypothetical prote	ӽ	ש	hypothetical 38.7K		hypothetical prote
SUMMARIES																														
SUMM	ΩI	A56101	B56101	A53019	A53317	\$22775	C70602	AH1045	D75319	140791	AB0796	G96541	T50954	E72631	T25958	T44958	T15104	T06161	GNVSPV	850397	QQBE4	A96542	TVHUSK	PNBPF6	T22264	T48425	A83534	856374	861	G91269
	80	7	~	~	~	~	7	7	~	7	7	~	~	~	~	~	~	7	-	~	7	7	ч	Н	N	~	~	Н	7	0
	Length	1315	1774	684	1388	1867	7	4	190	333	2	533		160		336	617	2311	3206	102	191	519	728	72	298	323	331	4		342
æ	Query Match	100.0	100.0	93.9	66.7	65.2	0	9.09	Φ	59.1	59.1	59.1	57.6	57.6	57.6		57.6	57.6	57.6	56.1	56.1	56.1	φ	54.5	54.5	54.5	54.5	54.5	54.5	54.5
	Score	99	99	62	44	43	40	40	39	39	39	39	38	38	38	38	38	38	38	37	37	37	37	36	36	36	36	36	36	36
	Result No.	٦	~	m	4	S	9	7	œ	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25			28	29

•	hypothetical prote	probable glycerol	phosphate ABC tran	conserved hypothet	hypothetical prote	hypothetical prote	probable nuclear p	hypothetical prote	H+/K+-exchanging A	high-affinity pota	high-affinity pota	outer membrane lip	probable outer mem	potassium-transpor	probable glucose-i	hypothetical prote
	T15069	H72748	G82286	AG0977	B86033	C91186	T37889	F83574	PWECCK	E85569	D90719	A81149	H81874	AE0587	H71260	B72729
	~	~	~	N	~	~	0	N	-	~	~	~	~	~	~	8
	358	370	548	651	959	656	1162	111	190	190	190	193	193	195	222	222
	54.5	54.5	54.5	54.5	54.5	54.5	54.5	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
	36	36	36	36	36	36	36	35	32	35	35	32	35	35	32	35
	30	31	32	33	34	35;	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

RESULT 1 A56101 collagen alpha 1(XVIII) chain precursor, short splice form - mouse N;Contains: endostatin C:Species: Mus musculus (house mouse)
C;Date: 03-Oct-1995 #sequence revision 08-May-1998 #text_change 09-Jul-2004 C;Accession: A56101; A58371; \$72450; S65595 R;Rehn, W; Pihajaniemi, T.
Aritle: Identification of three N-terminal ends of type XVIII collagen chains and tissu tif homologous to rat and Drosophila frizzled proteins.
 Arcession: A55101 Armolecule type: mRNA Armolecule in a mRNA
 A;Cross-references: UNIRROT.P39061; GB:U11636; NID:g618427; PIDN:AAC52178.1; PID:g61842 R;Rehn, M.; Pihlajaniemi, T.
 Proc. Natl. Acad. Sci. U.S.A. 91, 4234-4238, 1994 A.Title: Alphal (XVIII), a collagen chain with frequent interruptions in the collagenous A.Deference number. 188371. MITD.64240112. SMTD.8182804
 Ayelestine: Minute: According to the Artist of the Artist
 A;MOIECUIE CYPE: MKNA A;Resiques: 1-928 <reh2></reh2>
 A;Cross-reterences: GB:b16898; NID:g404/54; PIDN:AAA3/434.1; PID:g553894 R;Oh, S.P.; Kamagata, Y.; Muragaki, Y.; Timmons, S.; Ooshima, A.; Olsen, B.R.
 submitted to the EMBL Data Library, August 1993 A:Reference number: S72450
A/Accession: S72450
 A;Molecule type: mRNA a.posidnos: 28_687 /1. 689_234 /F/ 736_751 /P/ 753_1315 /OHW>
 A/Cross-references: EMBL:L22545; NID:g34956; PIDN:AAA19787.1; PID:g511298
 R;Oh, S.P.; Kamagata, Y.; MuragaKI, Y.; Timmons, S.; Oosnima, A.; Oisen, A.B.K. Proc. Natl. Acad. Sci. U.S.A. 91, 4229-4233, 1994
A;Title: Isolation and sequencing of cDNAs for proteins with multiple domains of Gly-Xa A;Reference number: A58370; MUID:94240111; PMID:8183893
A; Accession: S65595
A;MOIECUIE LYPE: MKNA A;Residues: 28-1315 <0HS>
A;Cross-references: EMBL:L22545 C:Comment: Prolines and lysines at the third mosition of the trineptide repeating unit
lated and subsequently O-glycosylated.
 C;Comment: The different splice forms of collagen alpha 1(XVIII) may be involved in per- C:Comment: Endostatin is released from collagen alpha 1(XVIII) chain by the action of u
 ay be useful in treating solid tumors.
CyGenetics A.Genetics MGT. Collean
A/Cross-references: MGI:71175
A:Map posttion: 10:41. 1 7. Formords: alternative onlicitor and organization inhibitor: chondroitin sulfate profesorly.
Cyneywolds: alteliacive bylicing, anglogometra limitator, chomalatrin salidate processiy. F/1-25/Domain: signal sequence #status predicted <81G>
F:24-235/Region: thrombospondin amino-terminal homologous F:24-235/Region: thrombospondin amino-terminal homologous

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Query Match
Best Local Similarity 100.0
...hes 13, Conservative
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Accession: C56101

Ac
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C; Species: Mus musculus (house mouse)
C; Date: 03-Oct-1995 #sequence revision 08-May-1998 #text change 09-Jul-2004
C; Accession: B56101, C56101; S72450; S65595; PN0675; A54072; A58816
R; Rehn, M.; Pihlajaniemi, T.
B; Biol. Chem. 270, 4705-4711, 1995
A; Title: Identification of three N-terminal ends of type XVIII collagen chains and tissutif homologous to rat and Drosophila frizzled proteins.
A; Reference number: A56101; MUID: 95181468; PMID: 7876242
F;364-437/Domain: collagenous #status predicted <CO2>
F;422-581/Domain: collagenous #status predicted <CO3>
F;607-689/Domain: collagenous #status predicted <CO3>
F;607-689/Domain: collagenous #status predicted <CO4>
F;704-745/Domain: collagenous #status predicted <CO6>
F;759-831/Domain: collagenous #status predicted <CO6>
F;842-874/Domain: collagenous #status predicted <CO6>
F;842-874/Domain: collagenous #status predicted <CO6>
F;892-894/Region: cell attachment (R-G-D) motif
F;982-969/Domain: collagenous #status predicted <CO9>
F;983-1000/Domain: collagenous #status predicted <CO9>
F;132-1315/Product: endostatin #status predicted <CO1>
F;1132-1315/Product: endostatin #status predicted <CO1>
F;1132-1315/Product: endostatin #status predicted <CO1>
F;122-228/Disulfide bonds: #status predicted (Ran) (covalent) #status predicted F;122-228/Disulfide bonds: #status predicted (Ser) (covalent) #status predicted F;1454,594/Binding site: carbohydrate (Ser) (covalent) #status predicted F;451,454,594/Binding site: chondroitin sulfate (Ser) (covalent) #status predicted
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A;Molecule type: mRNA
A,Residues: 635-1774 <ABE>
T,Rehn, M.; Hintikka, E.; Pihlajaniemi, T.
J. Biol. Chem. 269, 13929-13935, 1994
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Conservative 0
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Cross-references: GB: Z94752, GB: AL123456, NID: g3261731, PIDN: CAB08143.1, PID: g2052135 Experimental source: strain H37Rv
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C;Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 20-Jun-2000
C;Accession: (70602
R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Gordon, Connor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Holroyd, Rajanfream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S. Nature 393, 537-544, 1998
A;Authors: Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G.
A;Reference number: A70500; MUID:98295987; PMID:9634230
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637 QPILHL--LNTPV 647
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Collagen alpha 1(XV) chain precursor - human (SA3317)

Collagen alpha 1(XV) chain precursor - human (SA317)

Collagen alpha 1(XV) chain appear alpha 1000

Cybecies: Homo saplems (man)

Asili, Chem. 269, 4713-4719, 1994

Apitite: Primary structure of the alpha chain of human type XV collagen and exon-intron Apieterence number: A53117; MUID: 94148920; PMID: 8106446

Apitite: Primary structure of the alpha chain of human type XV collagen and exon-intron Apieterence number: A53117; MUID: 94148920; PMID: 8106446

Apitite: The human alpha (XV)

Ap
A;Note: in the authors' translation, 482-Gly is not shown, residues 483.490 are shifted C;Comment: Prolines and lysines at the third position of the tripeptide repeating unit (lated and subsequently O-glycosylated.

C;Comment: Different splice forms of collagen alpha 1(XVIII) may be involved in perivase C;Comment: Endostatin is released from collagen alpha 1(XVIII) chain by the action of un C;Genetics:

C;Genetics:
A;Gene: GDB:COL18A1

A;Cross-references: GDB:138752; OMIM:120328
A;Map position: 21q22.3-21q22.3
C;Keywords: alternative splicing; angiogenesis inhibitor; chondroitin sulfate proteoglyc F;1-59/Domain: collagenous fragment) #status predicted <COS>
F;1-59/Domain: collagenous #status predicted <COS>
F;1-201/Domain: collagenous #status predicted <COS>
F;25-278/Domain: collagenous #status predicted <COS>
F;25-24/Domain: collagenous #status predicted <COS>
F;25-278/Domain: collagenous #status predicted <COS>
F;25-278/Domain: collagenous #status predicted <COS>
F;25-278/Domain: collagenous #status predicted <COS>
F;26-264/Region: cell attachment (R-G-D) motif F;26-264/Region: collagenous #status predicted <COSO>
F;26-264/Region: multiplexin collagenous #status predicted <EST>
F;509-684/Region: multiplexin collagenous #status predicted <EST>
F;509-684/Region: multiplexin collagenous multiplexin collagenous #status predicted <EST>
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Pred. No. 0.0017;
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92.3%;
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Gaps

2,

Length 1867; 0; Indels

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Score 43; DB Pred. No. 18; 2; Mismatches

65.2**%**; 69.2**%**;

genome

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MOTI protein - yeast (Saccharomyces cerevisiae)
N;Alternate names: protein LPF4c; protein YPL082c
C;Species: Saccharomyces cerevisiae
C;Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 09-Jul-2004
C;Accession: S22775; S61106
R;Davis, J.L.; Kunisawa, R.; Thorner, J.
R;Davis, J.L.; Kunisawa, R.; Thorner, J.
A;Title: A presumptive helicase (MOTI gene product) affects gene expression and is requiable and second and second as A;Accession: S22775; MUID:92195335; PMID:1312673
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A; Residues: 1-1867 < DAV>
A; Cross-references: Universe; 
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A;Residues: 1-1867 <HAL>
A;Cross-references: EMBL:U41849; NID:g1147608; PID:g1147612; MIPS:YPL082c
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                     Length 1388;
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C;Keywords: DNA binding; nucleus; transmembrane protein
F;700-716/Domain: transmembrane #status predicted <TMl>
F;1038-1054/Domain: transmembrane #status predicted <TM2>
F;1186-1202/Domain: transmembrane #status predicted <TM3>
                     DB 2;
                                                                               8.7;
              Score 44; DB :
Pred. No. 8.7;
1; Mismatches
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A,Cross-references: SGD:S0006003; MIPS:YPL082c
Best Local Similarity 66.7%;
Matches 8; Conservative
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Rikruger, N.; Oppermann, F.B.; Lorenzl, H.; Steinbuchel, A.
J. Bacteriol. 176, 3614-3630, 1994
A;Title: Biochemical and molecular characterization of the Clostridium magnum acetoin de A;Title: Biochemical and molecular characterization of the A;Reference number: 140789; MUID:94266715; PMID:8206840
A;Accession: 140791
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: UNIPROT:046143; GB:L31844; NID:9472324; PIDN:AAA21745.1; PID:9472327 C;Superfamily: pyruvate dehydrogenase, El component, beta subunit C;Keywords: oxidoreductase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Species: Salmonella enterica subsp. enterica serovar Typhi
A;Note: this species has also been called Salmonella typhi
C;Date: 09-Nov-2001 #sequence_revision 09-Nov-2001 #text_change 18-Nov-2002
C;Accession: AB0796
R;Parkhill, J.; Dougan, G.; James, K.D.; Thomson, N.R.; Pickard, D.; Wain, J.; Churcher, K.P. T.; Connerton, P.; Cronin, A.; Davies, R.M.; Dowd, L.; White, N.; Farrar, S.; Moule, S.; O'Gaora, P.
Nature 413, 848-852, 2001
A;Atchors: Parry, C.; Quail, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; A;Title: Complete genome sequence of a multiple drug resistant Salmonella enterica serov A;Accession: AB0502; MUID:21534947; PMID:11677608
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C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Accession: G36541
R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alonso, Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K.; Chin, C.W.; Hughes, B.; Huizar, L.
Nature 408, 186-820, 2000
A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C.C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, Z.A.; Luros, J.S.; Malti, R.; Matziali,
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                                                                                         acetoin dehydrogenase (TPP-dependent) (EC 1.....) beta chain - Clostridium magnum
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A;Cross-references: GB:AL513382; PIDN:CAD07548.1; PID:g16503540; GSPDB:GN00176
                                                                                                                                    C;Species: Clostridium magnum
C;Date: 04-Sep-1997 #sequence_revision 04-Sep-1997 #text_change 12-Jul-2004
C;Accession: I40791
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 2;
21;
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Pred. No. 16;
3; Mismatches
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        59.1%;
58.3%;
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ilarity 61.5%;
Conservative
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297 PVVRIGALNTPI 308
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Best Local Similarity 58.3
Matches 7; Conservative
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Residues: 1-333 < KRU>
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C; Species: Deinococcus radiodurans
C; Species: Deinococcus radiodurans
C; Species: Deinococcus radiodurans
C; Species: Object of the color of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Species: Salmonella enterior subsp. enterior seamonella contented subsp. enterior ser C;Species: Salmonella enterior subsp. enterior servorar Typhi A;Note: this species has also been called Salmonella typhi (C;Date: 09-Nov-2001 #sequence_revision 09-Nov-2001 #text_change 18-Nov-2002 (C;Accession: AH1045 C; Accession: AH1045 C; Aumes, K.D; Thomson, N.R.; Pickard, D.; Wain, J.; Churcher, F, Pr. T.; Connerton, P.; Cronin, A.; Davis, P.; Davies, R.M.; Dowd, L.; White, N.; Farrar, S.; Moule, S.; O'Gaora, P. Nature 413, 848-852, 2001 M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; A;Authors: Parry, C.; Quail, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; A;Accession: AH1045 A
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C;Genetics:
                                                                                              Gaps
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            Length 176;
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                                                                                         Indels
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    , DB 2;
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Pred. No. 8.7;
1; Mismatches
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Pred. No. 11;
1; Mismatches
                                                                                 2; Mismatches
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        Score 40;
Pred. No.
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ilarity 66.7%;
Conservative
Query Match 60.6
Best Local Similarity 63.6
Matches 7; Conservative
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Best Local Similarity 77.8
Matches 7; Conservative
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                                                                                                                                                                                                                                                    PVVHLTALGSP 113
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Best Local Similarity
Matches 8; Conserv
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Indels

Length 160;

A;Gene: APE1508

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A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-258 «WAM>
A;Residues: 1-258 «WAM>
A;Cross-references: UNIPROT: P91543; EMBL: U80839; PIDN: AAB37912.1; GSPDB: GN00020; CESP: Zc
A;Experimental source: strain Bristol N2; clone ZC204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Mattar, S.; Souquet, M.; Henrich, H.J.; Engelhard, M. submitted to the EMBL Data Library, August 1996 A;Description: The first fully resolved primary structure of an archaeal succinate-deby. A;Reference number: 222881
                                                                                                                                                                                                                                                                                                                                                                                                                         hypothetical protein ZC204.3 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Accession: T25958
R;Wamsley, P.; Kramer, J.
Submitted to the EMBL Data Library, December 1996
A;Description: The sequence of C. elegans cosmid ZC204.
A;Reference number: Z20116
A;Accession: T25958
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C;Date: 21-Jan-2000 #sequence_revision 21-Jan-2000 #text_change 09-Jul-2004
C;Accession: T44958
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A;Cross-references: UNIPROT:P72108; EMBL:Y07709; PIDN:CAA68978.1
A;Experimental source: strain SP1 /28
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Pred. No. 25;
2; Mismatches
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80.0%; Pred. No. 19;
rative 1; Mismatches
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A,Molecule type: DNA
                                                                         Score 38; DB 2;
Pred. No. 11;
                                                                                                                                        4; Mismatches
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                                                                     57.6%;
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ilarity 63.6%;
Conservative
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312 PLCHLVALDEP 322
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A; Introns: 5/1; 123/3; 167/1
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LYLVALETPL
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nes 7; Conserv
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Best Local Similarity
Matches 6; Conserv
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Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon, ker, M.; Wu, D.; Yu, G.; Praser, C.M.; Venter, J.C.; Davis, R.W.
A;Title: Sequence and analysis of chromosome lof the plant Arabidopsis.
A;Accession: G96541
A;Status: preliminary
A;Status: preliminary
A;Status: 1-533 <STO>
A;Cross-references: UNIPROT:Q9LPS5; GB:AE005173; NID:g11054632; PIDN:AAG27877.1; GSPDB:CGGnetics:
A;Genetics:
A;Genet
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A;Title: Complete genome sequence of an aerobic hyper-thermophilic Crenarchaeon, Aeropyr A;Reference number: A72450; MUID:99310339; PMID:10382966
A;Accession: E72631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A,Molecule type: DNA
A,Reaidues: 1-160 <KAM>
A,Cross-references: UNIPROT: Q9YBU1; DDBJ:AP000061; NID:g5104821; PIDN:BAA80507.1; PID:d1
A,Experimental source: strain Kl
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Date: 21-Jul-2000 #sequence_revision 21-Jul-2000 #text_change 08-Sep-2000
Accession: T50954
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C;Species: Aeropyrum pernix
C;Date: 20-Aug.1999 #sequence_revision 20-Aug-1999 #text_change 09-Jul-2004
C;Accession: E72631
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Pred. No. 6.9;
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Pred. No. 27;
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Best Local Similarity 58.3
Matches 7; Conservative
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70 QPVLHQLQLESP 81
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neurospora

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STRAIN=1021;
MEDLINE=21396508; PubMed=11481431; DOI=10.1073/pnas.161294698;
Finan T.M., Weidner S., Wong K., Buhrmester J., Chain P.,
Vorhoelter F.J., Hernandez-Lucas I., Becker A., Cowie A., Gouzy J.,
Golding B., Puehler A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Heterogeneous distribution of TT virus of distinct genotypes in multiple tissues from infected humans.";
Virology 288:358-368(2001).
EMBL; ABD66992; BAB69897.1; -.
Pfam; PF02957; TT ORF2; 1.
SEQUENCE 249 AA; 27721 MW; B9195F046E67DCBB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
MEDLINE=21488921; PubMed=11601907; DOI=10.1006/viro.2001.1097;
Okamoto H., Nishizawa T., Takahashi M., Asabe S., Tsuda F.,
Yoshikawa A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conserved hypothetical membrane protein, paralogue of Y20848.
ORFNames=SMb21292;
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NCBI_TaxID=68887;
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Q9KDA4
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(c) 1993 - 2005 Compugen Ltd
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Wong S.S., Tae R.H., Chen R., Yang H., Liu B.K., Wang J., Teng J.L.,
Wong S.S., Tae R.H., Chen R., Yang H., Liu B., Yuen K.Y.;
The mitochondrial genome of the thermal dimorphic fungue Penicillium
marneffei is more closely related to those of molds than yeasts.";
TEBS Lett. 555:469-477(2003).

"The ATRIATIT ACTIVITY: NADH + ubiquinone = NAD(+) + ubiquinol.
-!-CATRLYTIC ACTIVITY: NADH + ubiquinone = NAD(+) + ubiquinol.
-!-SIMILARIY: Belongs to the complex I subunit 3 family.

EMBL; AX347307; AAQ54933.1; -.

GO; GO:0008137; F:NADH dehydrogenase (ubiquinone) activity; IEA.

GO; GO:0008137; F:NADH dehydrogenase (ubiquinone) activity; IEA.

GO; GO:0006120; P:mitochondrial electron transport, NADH to u. .; IEA.

Therefore, IRRO0444; Oxidored q4.

Mitochondrion; NAD; Oxidored case; Ubiquinone.

SEQUENCE 135 AA; 15488 WW; ADC5CAA7CE689A05 CRC64;
                                                                                                                                                                                            STRAIN=16M / ATCC 23456 / Biotype 1;

STRAIN=16M / ATCC 23456 / Biotype 1;

STRAIN=20020109; PubMed=1175668B; DOI=10.1073/pnas.221575398;

BEDLINE=20020109; PubMed=117568B; DOI=10.1073/pnas.221575398;

DelVecchio V.G., Kapatral N., Redkar R.J., Patra G., Mujer C., Los T., Ivanova N., Anderson I., Bhattacharyya A., Lykidis A., Reznik G., Jablonski L., Larsen N., D'Souza M., Bernal A., Mazur M., Goltsman E., Selkov E., Elzer P.H., Hagius S., O'Callaghan D., Letesson J.-J., Haselkorn R., Kyrpides N.C., Overbeek R.;

The genome sequence of the facultative intracellular pathogen Brucella melitensis.";
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Burotiales; Trichocomaceae; mitosporic Trichocomaceae; Penicillium.
NCBI_TaxID=37727;
                                                                                        Brucella melitensis.
Bacteria; Proteobacteria; Alphaproteobacteria; Rhizobiales;
Brucellaceae; Brucella.
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Pred. No. 38;
3; Mismatches 2; Indels
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      01-WAR-2002 (TrEMBLrel. 20, Last sequence update) 01-WAR-2004 (TrEMBLrel. 26, Last annotation update) Hypothetical Membrane Spanning Protein.
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05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
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EMBL, AE009592; AAL52753.1; -.
PIT, AF3448; AF3448.
PEGRI, PPO6181; DUP989; 1.
PROSITE; PS00190; CYTOCHROME_C; UNKNOWN_1.
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les 6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Penicillium marneffei.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Complete proteome. SEQUENCE 417 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                             NCBI_TaxID=29459;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Name=nad3;
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"The complete sequence of the 1,683-kb pSymB megaplasmid from the N2-fixing endosymbiont Sinorhizobium meliloti.";
Proc. Natl. Acad. Sci. U.S.A. 98:9889-9894(2001).
PIR: D95941; D95941.
InterPro; IPR0000345; Cytc_heme_BS.
InterPro; IPR0000345; Cytcchrome_c.
                                                                                                                                                                                                                                                                                                                            Gaps
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STRAIN=1330 / Biovar 1;

MEDLINE=22247741; PubMed=12271122; DOI=10.1073/pnas.192319099;

Paulsen I.T., Seshadari R., Nelson K.E., Eisen J.A., Heidelberg J.F.,

Read T.D., Dodson R.J., Umayam L.A., Brinkac L.M., Beanan M.J.,

Daugherty S.C., DeBoy R.T., Durkin A.S., Kolonay J.F., Madupu R.,

Nelson W.C., Ayodeji B., Kraul M., Shetty J., Malek J.A.,

Van Aken S.E., Riedmuller S., Tettelin H., Gill S.R., White O.,

Eraser C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "The Brucella suis genome reveals fundamental similarities between
                                                                                                                                                                                                                                                                                                                            ö
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Brucellaceae, Brucella.
NCBI_TaxID=29461,
                                                                                                                                                                                                                                                                                  Score 41; DB 2; Length 412;
Pred. No. 38;
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                                                                                                                                                                        Pfam; PF06181; DUF989; 1.
PROSITE; PS00190; CYTOCHROME C; UNKNOWN 1.
Complete Proteome; Hypothetical protein; Plasmid.
SEQUENCE 412 AA; 46126 MW; 8088BBEDCG66F8838 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         414 AA; 46576 MW; 9B7273469FFD36F6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         animal and plant pathogens and symbionts.";
Proc. Natl. Acad. Sci. U.S.A. 99:13148-13153(2002)
EMBL; ACD14347; AAN29300.1; -.
TIGR; BR0353; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                69.5%; Score 41; DB 2; 54.5%; Pred. No. 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      414 AA.
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3; Mismatches
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InterPro; IPR009056; Cytochrome_c.
InterPro; IPR010389; DUF989.
Pfam; PP06181; DUF989; 1.
                                                                                                                                                                                                                                                                                  69.5%;
54.5%;
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                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 54...
6; Conservative
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Best Local Similarity 54.5
Matches 6, Conservative
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Q8G2G9

RESULT 3

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Length 135;

DB 2; 19;

Score 40; I Pred. No. 1

67.8%; S 100.0%;

Query Match Best Local Similarity

QBYFF0; 01-MAR-2002 (TrEMBLrel. 20, Created)

Q8YFF0 RESULT 4
Q8YF0
ID Q8YF1
AC Q8YF1
DT 01-M

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MEDLINE=98344137; PubMed=9679194;
 InterPro; IPR010389; DUF989
                                                                                                                                                                                                                                                                                                                                Nucleopolyhedrovirus.
NCBI_TaxID=10454;
                                                            Complete proteome.
SEQUENCE 408 AA;
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01-JUN-2003
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O59545;
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Q9J894;
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Cestaro A., Malacrida G., Simionati B., Cannata N., Bartlett D.,
Valle G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genome analysis of Photobacterium profundum reveals the complexity of
                                                                                                                                                                                                                                                                    STRAIN-EX96243;

X PubMed=15377794;

Holden M.T.G., Titball R.W., Peacock S.J., Cerdeno-Tarraga A.M.,

A Atkins T., Crossman L.C., Pitt T., Churcher C., Mungall K.,

Bentley S.D., Sebaihia M., Thomson N.R., Bason N., Beacham I.R.,

Bentley S.D., Sebaihia M., Thomson N.R., Dason N., Beacham I.R.,

Brown K., Brown K.A., Brown N.F., Challis G.L., Cherevach I.,

A Chillingworth T., Cronin A., Crosset B., Davis P., DeShazer D.,

A Feltwell T., Fraser A., Hance Z., Hauser H., Holroyd S., Jagels K.,

A Rabbinowitech E., Rutherford K., Sanders M., Simmonds M.,

Songsivilai S., Stevens K., Tumapa S., Vestratchavest M.,

Whitehead S., Yeats C., Barrell B.G., Oyston P.C.F., Parkhill J.;

"Genomic plasticity of the causative agent of melioidosis,

Burkholderia pseudomallei.";

Broc. Natl. Acad. Sci. U.S., 101:14240-14245(2004).
 Gaps
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                                                                                                                                                                                            Burkholderia pseudomallei K96243.
Bacteria, Proteobacteria, Betaproteobacteria, Burkholderiales,
Burkholderiaceae, Burkholderia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Photobaccerium profundum (Photobaccerium sp. (strain SS9)).
Bacteria; Proteobacteria; Gammaproteobacteria; Vibrionales;
Vibrionaceae; Photobacterium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 40; DB 2; Length 299;
Pred. No. 42;
 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              high pressure adaptations.";
Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases.
EMBL; CR378670; CR30645.1; ---
InterPro; IPR00345; CytC, heme BS.
InterPro; IPR009056; CytoChrome_c.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              38063.1; -.
32985 MW; 5993F6250CF3C589 CRC64;
                                                                                                                               25-0CT-2004 (TrEMBLrel. 28, Created)
25-0CT-2004 (TrEMBLrel. 28, Last sequence update)
25-0CT-2004 (TrEMBLrel. 28, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-JUL-2004 (TrEMBLrel. 27, Created)
5-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Hypothetical protein ATU2314.
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                                                                                                          299 AA.
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0; Mismatches
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                                                                                                           PRT;
                                                                                                                                                                      LysR family regulatory protein.
ORFNames=BPSS0606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67.8%;
63.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 63.0
7; Conservative
                                                                                                           PRELIMINARY;
7; Conservative
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262 APHNYYAVTPI 272
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      299 AA;
                                              26 SPHNSYI 32
                        SPHNSYI 7
                                                                                                                                                                                                                                 NCBI_TaxID=272560;
                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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Matches
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                                                                                                                                                                                                               Gaps
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Submitted (JUL-1995) to the EMBL/GenBank/DDBJ databases.
EMBL; AF169823; AAF31371.1; -.
GO; GO:0004527; F:exonuclease activity; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE=20036646; PubMed=10567663;
IJKel W.F., van Strien E.A., Heldens J.G., Broer R., Zuidema D.,
Goldbach R.W., Vlak J.M.;
"Sequence and organization of the spodoptera exigua multicapsid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
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Pred. No. 59;
                                                                                                                                                              Length 408
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                                                                                                             44670 MW; 2D8BC0D825F26CFE CRC64;
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Viruses; dsDNA viruses, no RNA stage; Baculoviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (TrEMBLrel. 15, Created)
(TrEMBLrel. 15, Last sequence update)
(TrEMBLrel. 24, Last annotation update)
InterPro, IPR006162; Ppantne_S.
Pfam; PF06181; DUF989; I.
PROSITE; PS00190; CYTOCHROME C; UNKNOWN I.
PROSITE; PS00012; PHOSPHOPANTETHEINE; UNKNOWN I.
                                                                                                                                                            Score 40; DB 2;
Pred. No. 58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-OCT-2001 (Rel. 40, Last sequence update) 05-UUL-2004 (Rel. 44, Last annotation update) Hypothetical UPF004 protein PH1875. OrderedLocusNames-PH1875.
                                                                                                                                                                                                                                                                                                                                                                                                                         413 AA
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                                                                                                                                                                                                          3; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleopolyhedrovirus genome.";
J. Gen. Virol. 80:3289-3304(1999).
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                                                                                                                                                            67.8%;
54.5%;
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                                                                                                                                                                                  Local Similarity 54.5
es 6; Conservative
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nes 6; Conservative
                                                                                                                                                                                                                                                                                   221 SRHNNYLTLPV 231
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232 YNSYWLPV 240
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                 S X B B B B B
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                                                                                                                                                                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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Kawarabayasi Y., Sawada M., Horikawa H., Haikawa Y., Hino Y., Yamamoto S., Sekine M., Baba S.-I., Kosugi H., Hosoyama A., Nagai Y., Sakai M., Ogura K., Otsuka R., Nakazawa H., Takamiya M., Ohtku Y., Funahashi T., Tanaka T., Kudoh Y., Yamazaki J., Kushida N., Oguchi A., Aoki K.-I., Yoshizawa T., Nakamura Y., Robb F.T., Horikoshi K., Complete sequence and gene organization of the genome of a hyper-thermophilic archaebacterium, Pyrococcus horikoshii OT3."; DNA Res. 5:55-76(1998).
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DNA Res. 9:189-197(2002).
EMBL; AP005944; BAC479373.1; -.
InterPro; IPR000345; CytC_heme_BS.
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Bacteria, Proteobacteria, Alphaproteobacteria, Rhizobiales,
Bradyrhizobiaceae, Bradyrhizobium.
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Last annotation update)
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InterPro; IPR006638; Elp3/Miab/NifB.
InterPro; IPR006466; MaBa like B.
InterPro; IPR007197; Radical_SAM.
InterPro; IPR002792; TRAM.
InterPro; IPR00839; UPF0004.
Pfam; PF04055; Radical_SAM; 1.
Pfam; PF04059; TRAM; 1.
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TIGREAMS; TIGR01578; MiaB-like-B; 1.
TIGREAMS; TIGR00099; UPF0004; 1.
PROSITE; PS50926; TRAM; 1.
PROSITE; PS01278; UPF0004; 1.
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OrderedLocusNames=b112708;
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Matches 7; Conservative
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134 SPRNVYFILPI 144
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Q89RQ4
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ol-UNN-2001 (TrEMBLrel. 17, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last amnotation update)
Mus musculus 14, 17 days embryo head cDNA, RIKEN full-length enriched
library, clone:3200001M10 product:procollagen, type XVIII, alpha 1,
full insert sequence. (Fragment).
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MEDLINE=99279253; Pubmed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
Carninci P., Hayashizaki Y.;
"High-efficiency full-length cDNA cloning.";
Meth. Enzymol. 303:19-44(1999).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
STRAIN=IM2 / ATCC 51768 / DSM 7523;
MEDLINE=21664397; PubMed=11792669; DJI=10.1073/pnas.241636498;
Fitz-Gibbon S.T., Ladner H., Kim U.-J., Stetter K.O., Simon M.I.,
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Eukaryota; Merazoa; Chordata; Craniata; Vertebrata; Euteleosto
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
NCBI_TaxID=10090;
                                                                                                                                       Length 442;
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                                                                                               6882BFE598C907AE CRC64;
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Archaea; Crenarchaeota; Thermoprotei; Thermoproteales;
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                                                                                                                                                                                                                                                                                                                                                                                                                 Last sequence update)
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EMBL; AE009841; AAL63743.1; -.
Complete prodeme 93 AA; 9497 MW; S98864288C4EFPBF3 (
                                                                                                                                   Score 40; DB 2;
Pred. No. 63;
3; Mismatches
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Pred. No. 20;
1; Mismatches
InterPro; IPR009056; Cytochrome_c.
InterPro; IPR010389; DUF989.
Pfam; PF06181; DUF989; 1.
PROSITE; PS00190; CYTOCHROME_C; UNKNOWN_1.
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01-JUN-2001 (TrEMBLrel. 17, Last seq
01-MAR-2004 (TrEMBLrel. 26, Last ann
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01-MAR-2002 (TrEMBLrel. 20, Las
01-UIN-2003 (TrEMBLrel. 24, Las
Conserved within P. aerophilum.
                                                                                                 48389 MW;
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77.8%;
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                                                                            Complete proteome.
SEQUENCE 442 AA;
                                                                                                                                       Query Match
Best Local Similarity
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Best Local Similarity
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Addachi J., Alzawa K., Akhahira S., Akimura T., Arai A., Aono H.,

Adachi J., Alzawa K., Akahira S., Pukunishi Y., Furuno M.,

Anakawa T., Hara A., Hayatsu N., Hiramoto K., Hiraoka T., Hori F.,

Anakawa J., Kojima Y., Konno H., Kouda M., Kasukawa T., Kato H.,

Rawai J., Kojima Y., Konno H., Kouda M., Koya S., Kurihara C.,

A Kawai J., Kojima Y., Conno H., Kouda M., Koya S., Kurihara C.,

A Kawai J., Kojima Y., Tonno H., Kouda M., Koya S., Kurihara C.,

A Rawai J., Kojima Y., Tonno H., Kouda M., Koya S., Kurihara C.,

A Rawai J., Kojima Y., Tonno H., Kouda M., Koya S., Kurihara C.,

A Sano H., Sasaki D., Shibata Y., Shibata Y., Shinaqawa A., Shiraki T.,

A Sogabe Y., Suzuki H., Tagami M., Tagawa A., Takahashi F., Tanaka T.,

A Pijma Y., Toya T., Yamamura T., Yasunishi A., Yoshino M.,

A Wiramatsu M., Hayashizaki Y.;

B HSD, MOSSOGI J. Collea.

B KGD, GO:0005619; C:aktracellular space; TAS.

GO: GO:0001886; P:endothelial cell morphogenesis; IDA.

GO: GO:0001805; P:positive regulation of apoptosis; IDA.

GO: GO:0008284; P:positive regulation of cell migration; IDA.

B HERPER, P. POSITIVE regulation of cell proliferation; IDA.

B HERPER, P. POSITIVE regulation of cell proliferation; IDA.

B HERPER, P. POSITIVE regulation of cell proliferation; IDA.

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STRANT=C57BL/6J; TISSUE=Head;
MEDLINE=C57BL/6J; TISSUE=Head;
MEDLINE=C57BL/6J; TISSUE=Head;
MEDLINE=C97BL/6J; TISSUE=Head;
MEDLINE=C9.4, Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M.,
Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
Wormalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new genes.";
Genome Res. 10:1617-1630(2000).
                                                                                                                                                                                                                                     the RIKEN Genome Exploration Research Group Phase I & II Team; "Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs."; Nature 420:563-573 (2002).
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STRAIN=C57BJ/6J; TISSUB=Head;

MEDLINE=2530913; DubMed=11076861; DOI=10.1101/gr.152600;

MEDLINE=2530913; DubMed=11076861; DOI=10.1101/gr.152600;

Shibate K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P., Konno H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itoh M., Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A., Yamamoto R., Matsunco H., Sakaguchi S., Ikegami T., Kashiwagi K., Pujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watahiki M., Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J., Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.;

"RIKEN integrated sequence analysis (RISA) system-384-format Genome Res. 10:1757-1771(2000).
                                                                                   RIKEN FANTOM Consortium; "Functional annotation of a full-length mouse cDNA collection."; Nature 409:685-690(2001).
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                                       STRAIN=C57BL/61; TISSUE=Head;
MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
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The FANTOM Consortium,
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Best Local Similarity
Matches 9; Conserv
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9; Conservative

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MEDLINE=21476596; PubMed=11592600; DOI=10.1016/S0168-8278(01)00134-9; Jia J.D., Bauer M., Sedlaczek N., Herbst H., Ruehl M., Hahn B.G., Riecken E.O., Schuppan D.; Herbst H., Ruehl M., Hahn B.G., Modulation of collagen XVIII/endostatin expression in lobular and biliary rat liver fibrogenesis."; J. Hepstol. 35:386-391(2001).
EMBL; AJ236873; CAB44263.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Merazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBI_TaxID=10116;
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Sciurognathi; Muridae; Murinae; Rattus.
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MEDLINE=20227226; PubWed=10766159;
MEDLINE=20227226; PubWed=10766159;
MEDLINE=2022726; PubWed=10766159;
MEDLINE=2022726; PubWed=10766159;
MALTITUMOR activity of endostatin against carcinogen-induced rat
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81.8%; Pred. No. 37;
ive 0; Mismatches 2; Indels
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171 AA; 18933 MW; 81BE2EE3FC2C8E72 CRC64;
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                                                                                                                                                                                                                                                                                                                                          Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Collagen XVIII (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                               Collagen type XVIII, alpha (I) chain (Fragment)
Name=coll8al;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            226 AA
                                                                                                                                                                                                                            171 AA
                                                                                                                                                                                                                                                                                                         Created)
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                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                primary mammary tumors.";
Cancer Res. 60:1793-1796(2000).
Embr., AF189709; AAF00975.1; -.
HSSP; P39061; 1DY1.
InterPro; IPR010515; Endostatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR010515; Endostatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF06482; Endostatin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam; PF06482; Endostatin; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ilarity 81.8%;
Conservative
                                                                                                                                                                                                                                                                                                 01-NOV-1999 (TrEMBLrel. 12, 01-NOV-1999 (TrEMBLrel. 12, 01-MAR-2004 (TrEMBLrel. 26,
140 SCHNSYIVLCI 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        156 SCHNSYIVICI 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 SPHNSYIVLPI 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rattus norvegicus (Rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rattus norvegicus (Rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
nes 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                     01-NOV-1999
01-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE=Liver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Collagen.
NON TER
SEQUENCE
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                                                                                                                                                                                                                                    O34608;
O1-DEC-2001 (TERBILE1.19, Created)
O1-DEC-2001 (TERBILE1.19, Last sequence update)
O1-DEC-2001 (TERBILE1.19, Last sequence update)
O1-DEC-2001 (TERBILE1.19, Last annotation update)
Long cell-linked locus protein.
Long cell-linked locus protein.
Eva mays (Waize).
Evaryous, Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
PACCAD clade; Panicoideae; Andropogoneae; Zea.
                                             ö
Query Match
Best Local Similarity 81.8%; Pred. No. 49;
Matches 9; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 66.1%; Score 39; DB 2; Length 316; Best Local Similarity 70.0%; Pred. No. 69; Matches 7; Conservative 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. Gratel V., Puigdomenech P.; Graziano B.I., Stiefel V., Puigdomenech P.; Submitted (APR-2001) to the EMBL/GenBank/DDBJ databases. EMBL, AF9744651, AAL26975.1; SEQUENCE 316 AA; 34551 MW; 833126FE0DBB488B CRC64;
                                                                                                                                                                                                                     PRT; 316 AA.
                                                                                                      206 SCHNSYIVLCI 216
                                                                                                                                                                                                                     PRELIMINARY;
                                                                                1 SPHNSYIVLPI 11
                                                                                                                                                                                                                     Q946U8
                                                                                                                                                                            RESULT 15
2946U9
AC 0946U0
DT 01-DE
DT 01-DE
DE Long
OC EURART
OC EURART
OC SPERM
OC NCBI
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Search completed: March 10, 2005, 11:09:28 Job time : 46.2895 secs

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5.1.6
Compugen Ltd.
GenCore version (c) 1993 - 2005
          Copyright
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protein search, using sw model OM protein - Run on:

March 10, 2005, 11:00:49 ; Search time 9.55263 Seconds
(without alignments)
110.795 Million cell updates/sec

US-09-766-412-29 59 1 SPHNSYIVLPI 11 Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

283416 segs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

seq length: 0 seq length: 200000000 Minimum DB Maximum DB

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:* 4 2 6 4

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		de			SUMMARIES	
Result No.	Score	Query Match	Query Match Length	DB	ID	Description
	41	69.5	412	7	D95941	conserved hypothet
7	41		417	~	AF3448	hypothetical membr
٣	40	67.8	432	Н	F71200	_
4	39	66.1	209	٦	HHFF26	ы
2	39	66.1	410	~	E95984	conserved hypothet
9	39	66.1	428	8	AI2860	conserved hypothet
7	39	66.1	428	7	H97637	hypothetical prote
œ	39	66.1	1315	~	A56101	collagen alpha 1(X
6	39	66.1	1774	~	B56101	collagen alpha 1(X
10	38.5	65.3	818	Н	A30107	ဋ
11	38	64.4	208	~	859950	u
12	38	64.4	425	~	D83455	hypothetical prote
13	37	62.7	102	~	T07890	protein kinase (EC
14	37	62.7	179	~	F83813	phosphatidylserine
15	37	62.7	264	~	H70903	probable transcrip
16	37	62.7	352	~	F83729	hypothetical prote
17	37	62.7	475	~	AC0898	PTS system, sugar
18	37	62.7	519	~	T48498	hypothetical prote
19	37	62.7	528	N	T34417	delayed rectifier
20	37	62.7	634	~	140217	glutaryl 7-ACA acy
21	37	62.7	985	~	T41135	·н
22	37	62.7	1264	N	T19545	
23	37	62.7	2894	~	C64474	hypothetical prote
24	36	61.0	208	~	G96758	protein trypsin in
25	36	61.0	358	7	A96164	geplA protein (AF1
56	36	61.0	358	~	AF3123	sugar nucleotide e
27		61.0	9	7	T32406	hypothetical prote
28	36	61.0	880	~	G90163	DNA-directed RNA p
29		61.0	1663	Н.	C3RT	complement C3 prec

ATPase subunit 8 -	hypothetical prote	hypothetical prote	hypothetical prote	amidinotransferase	hypothetical prote	hypothetical prote	hypothetical prote	PTS system, fructo	hypothetical prote	hypothetical prote	RING finger protei	hypothetical prote	probable protein k	probable rimI prot	hypothetical prote
T11383	F84012	T24470	C87256	S44235	T20622	E64140	T04767	G70150	T39409	T28915	S49445	E91276	T38058	A70738	H97826
7	~	~	0	7	N	~	N	N	N	~	N	~	~	~	0
53	109	165	210	319	381	416	493	625	652	2076	388	131	149	158	212
59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	58.5	57.6	57.6	57.6	57.6
35	32	35	35	35	35	35	35	35	35	35	34.5	34	34	34	34
30	31	32	33	34	32	36	37:	38	39	40	41	42	43	44	45

ALIGNMENTS

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- Sino conserved hypothetical membrane protein, paralogue of Y20848 SMb21292 [imported] C;Species: Sinorhizobium meliloti C;Date: 24-Aug-2001 #sequence_revision 24-Aug-2001 #text_change 09-Jul-2004

C,Accession: D95941
R,Finan, T.M.; Weidner, S.; Wong, K.; Buhrmester, J.; Chain, P.; Vorholter, F.J.; Hernau Proc. Natl. Acad. Sci. U.S.A. 98, 9889-9894, 2001
A,Title: The complete sequence of the 1,683-kb pSymB megaplasmid from the N2-fixing end. A;Reference number: A95842; MUID:21396508; PMID:11481431

A;Status: preliminary

A; Residues: 1-412 < KUR.
A; Experimental source: strain 1021, megaplasmid pSymB
A; Experimental source: strain 1021, megaplasmid pSymB
R; Galibert, F.; Finan, T.M.; Long, S.R.; Puhler, A.; Abola, P.; Ampe, F.; Barloy-Hubler, Bridalibert, P.; Chain, P.; Cowie, A.; Davis, R.W.; Dreano, S.; Federspiel, N.A.; Fisher, R.F.
L.; Hyman, R.W.; Jones, T.
Science 293, 668-672, 2001
A; Althors: Kahn, M.L.; Kalman, S.; Keating, D.H.; Kiss, E.; Komp, C.; Lelaure, hebault, P.; Vandenbol, M.; Vorholter, F.J.; Weidner, S.; Wells, D.H.; Wong, K.; Yeh, K.
A; Title: The composite genome of the legume symbiont Sinorhizobium meliloti.
C; Genetics:
C; Genetics:

A;Genome: plasmid

Gaps ö 69.5%; Score 41; DB 2; Length 412; 54.5%; Pred. No. 5.9; ive 3; Mismatches 2; Indels Conservative Query Match Best Local Similarityhes 6; Conserv?

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225 STHNNYLTLPV 235 1 SPHNSYIVLPI 11 ò 셤

AF348

hypotherical membrane spanning protein BMEI1572 [imported] - Brucella melitensis (strain Cispecies: Brucella melitensis (strain Cispecies: Brucella melitensis (strain Cispecies: Brucella melitensis (strain Cispecies: Brucella melitensis (strain Cipate: 01-Feb-2002 #sequence_revision 01-Feb-2002 #text_change 09-Jul-2004 C; Accession: AF348

C; Accession: AF348

Broc. Natl. Acad. Sci. U.S.A. 99, 443-448, 2002

Froc. Natl. Acad. Sci. U.S.A. 99, 443-448, 2002

Froc. Natl. Acad. Sci. U.S.A. 99, 443-448, 2002

A; Rittle: The genome sequence of the facultative intracellular pathogen Brucella meliten A; Reference number: AD3252; PMID:11756688

A; Accession: AF3448

A; Status: preliminary

A; Molecule type: DNA

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conserved hypothetical membrane protein, paralogue of Y21292 SMb20848 [imported] - Sino. C.Species: Sinorhizobium meliloti
C.Species: Sinorhizobium meliloti
C.Date: 24-Aug-2001 #sequence_revision 24-Aug-2001 #text_change 09-Jul-2004
C.Accession: E95984
R.Finan, T.M.; Weidner, S.; Wong, K.; Buhrmester, J.; Chain, P.; Vorholter, F.J.; Hernan
Proc. Natl. Acad. Sci. US.A. 98, 9889-9884, 2001
A;Title: The complete sequence of the 1,683-4kb pSymB megaplasmid from the N2-fixing endo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Accession: E95984
A;Accession: E95984
A;Atatus: preliminary
A;Acadecule type: DNN:CAC49541.1; PID:g15141028; GSPDB:CA;Coss-references: UNPROT:Q92U19; GB:AL591985; PIDN:CAC49541.1; PID:g15141028; GSPDB:CA;Coss-references: Universe; Brain 1021, megaplasmid pSymB
A;Cross-references: Universe; Brain 1021, megaplasmid pSymB
A;Calibert, F.; Finan, T.M.; Long, S.R.; Puller, A.; Abola, P.; Ampe, F.; Barloy-Hubler, Pela, D.; Chain, P.; Cowie, A.; Davis, R.W.; Dreano, S.; Federspiel, N.A.; Fisher, R.F., Science 293, 668-672, 2001
A;Authors: Kahn, D.; Kahn, M.L.; Kalman, S.; Keating, D.H.; Kiss, E.; Komp, C.; Lelaure, A;Authors: Kahn, Composite genome of the legume symbiont Sinorhizobium meliloti.
A;Reference number: A96039; MUID:21368234; PMID:11474104
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A;Authors: Yoo, H.; Tao, Y.; Biddle, P.; Jung, M.; Krespan, W.; Perry, M.; Gordon-Kamm,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: UNIPROT:Q8UD14; GB:AE008688; PIDN:AAL43303.1; PID:g17740794; GSPDB:<A;Experimental source: strain C58 (Dupont)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A,Title: The Genome of the Natural Genetic Engineer Agrobacterium tumefaciens A,Reference number: AB2577; MUID:21608550; PMID:11743193 A,Accession: A12860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           conserved hypothetical protein Atu2314 [imported] - Agrobacterium tumefacier
C;Species: Agrobacterium tumefaciens
C;Date: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
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Pred. No. 14;
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A;Map position: circular chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           66.1%;
54.5%;
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29 PHSRYVLLPL 38
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SLHNNYLTLPV
   PHNSYIVLPI
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Best Local Similarity
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Best Local Similarity
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A; Residues: 1-428 < KUR>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Gene: SMb20848
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                   A,Cross-references: UNIPROT:Q8YFFO, GB.AE008917; PIDN:AAL52753.1; PID:g17983585; GSPDB:G
A,Experimental source: strain 16M
Genetic Second Seco
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R)Kawarabayasi, Y.; Sawada, M.; Horikawa, H.; Haikawa, Y.; Hino, Y.; Yamamoto, S.; Sekin M.; Offickuu, Y.; Punahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; Kushida, N.; Oguchi DNA Res. 5, 55-76, 1998

A;Title: Complete sequence and gene organization of the genome of a hyper-thermophilic a A;Reference number: A71000; MUID:98344137; PMID:9679194

A;Accession: F71200

A;Status: preliminary; nucleic acid sequence not shown; translation not shown

A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A,Cross-references: GB:AP000007; NID:g3236134; PIDN:BAA30997.1; PID:g3258314
A,Experimental source: strain OT3
A,Subte: this accession replaces an interim accession for a sequence replaced by GenBank C,Genetics:
A,Gene: PH1875
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hypothetical protein PH1875 - Pyrococcus horikoshii
C;Species: Pyrococcus horikoshii
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 12-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           heat shock protein 26 - fruit fly (Drosophila melanogaster)
C,Species: Drosophila melanogaster
C,Date: 15-Nov-1984 #sequence_revision 15-Nov-1984 #text_change 09-May-2004
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A;Map position: 3L (67B)
C;Superfamily: alpha-crystallin-related small heat shock protein
C;Keywords: heat shock; stress-induced protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  67.8%; Score 40; DB 1; Length 432;
63.6%; Pred. No. 9.6;
cive 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                 Length 417;
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Pred. No. 6.6;
4; Mismatches 1; Indels
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Pred. No. 5.9;
3; Mismatches
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Best Local Similarity 54.5
Matches 6; Conservative
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Matches 5; Conserv
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- Agrobacterium tumefaciens (strain Ct

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Gaps

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Length 428;

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Gaps

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Indels

Length 410;

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C;Comment: The different splice forms of collagen alpha 1(XVIII) may be involved in per C;Comment: Endostatin is released from collagen alpha 1(XVIII) chain by the action of un ay be useful in treating solid tumors.
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C; Keywords: alternative splicing; angiogenesis inhibitor; chondroitin sulfate proteogly.
C; Keywords: alternative splicing; angiogenesis inhibitor; chondroitin sulfate proteogly.
F; 12-25/Domain: signal sequence #status predicted <SIG>
F; 24-235/Region: thrombospondin amino-terminal homologous
F; 26-1315/Region: thrombospondin amino-terminal homologous
F; 26-1315/Region: collagenous #status predicted <CO3>
F; 364-37/Domain: collagenous #status predicted <CO3>
F; 607-689/Domain: collagenous #status predicted <CO3>
F; 704-745/Domain: collagenous #status predicted <CO3>
F; 759-831/Domain: collagenous #status predicted <CO3>
F; 842-874/Domain: collagenous #status predicted <CO3>
F; 887-910/Domain: collagenous #status predicted <CO3>
F; 881-918/Poduct: endostatin #status predicted <CO3>
F; 881-132-1315/Product: endostatin #status predicted <SIT>
F; 1132-1315/Product: endostatin #status predicted <SIT>
F; 1156-188 Binding site: carbohydate (ASI) (covalent) #status predicted <SIT>
F; 1156-188 Binding site: carbohydate (ASI) (covalent) #status predicted
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A;Molecule type: mRNA
A;Resdues: 1-562 «REH1)
A;Cross-references: UNIPROT:Q61434; GB:U11637; NID:g618429; PIDN:AAC52179.1; PID:g61843:
A;Experimental source: splice form clone PE17.24
A;Accession: C56101
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A;Residues: 487-1146, L',1148-1193, F',1195-1210, 'R',1212-1512, 'L',1514-1522, 'F',1524-1-
A;Cross-references: EMBL:L22545; NID:g348968; PIDN:AAA19707.1; PID:g511298
A;Cross-references: EMBL:L22545; NID:g348968; PIDN:AAA19707.1; PID:g511298
R;Oh, S.P.; Kamagata, Y.; Muragaki, Y.; Timonos, S.; Ooshima, A.; Olsen, A.B.R.
Proc. Natl. Acad. Sci. U.S.A. 91, 4229-4233, 1994
A;Title: Isolation and sequencing of cDNAs for proteins with multiple domains of Gly-Xa
A;Reference number: A58370; MUD:94240111; PMID:8183893
A;Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                     angiogenesis inhibitor; chondroitin sulfate proteogly
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C; Date: 03-Oct-1995 #sequence revision 08-May-1998 #text change 09-Jul-2004
C; Date: 03-Oct-1995 #sequence revision 08-May-1998 #text change 09-Jul-2004
C; Date: 03-Oct-1995 #sequence revision 08-May-1998 #text change 09-Jul-2004
C; Date: 03-Oct-1995 #sequence revision 08-May-11998 #text change 09-Jul-2004
C; Date: 03-Oct-1995 #sequence revision 08-May-11, 1995
D; Diol. Chem. 270, 4705-4711, 1995
D; Diol. Chem. 2705-4711, 1995
D; Diol. Chem. 2705
D; Diol. Chem. 2705-4711, 1995
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D;
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(Ser) (covalent) #status predicted
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S.; Ooshima, A.; Olsen, B.R.
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Pred, No. 51;
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A; Residues: 1-239,487-562 <REH2>
A; Cross-references: GB:UI1637; NID:g618429
A; Experimental source: splice form clones PEB.1,
R; Oh. S.P.; Kamagata, Y.; Muragaki, Y.; Timmons,
submitted to the EMBL Data Library, August 1993
A; Reference number: $72450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F;172-228/Disulfide bonds: #status predicted F;240,245,1257/Binding site: carbohydrate (Ser) F;451,454,594/Binding site: chondroitin sulfate
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81.8%;
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A,Map position: 10:41.0
C,Keywords: A.
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Matches 9; Conservative
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                                                                                                                                                                                                                                                                                                                                                     Cyaccession: H97637
Rigodner, Beguence_revision 30-Sep-2001 #text_change 09-Jul-2004
Cyaccession: H97637
Rigodner, B.; Hinkle, G.; Gattung, S.; Miller, N.; Blanchard, M.; Qurollo, B.; Goldman, A.; Liu, F.; Wollam, C.; Allinger, M.; Doughty, D.; Scott, C.; Lappas, C.; Markelz, B.; Science 294, 2323-2328, 2001
A;Title: Genome Sequence of the Plant Pathogen and Biotechnology Agent Agrobacterium tum A;Reference number: A97359; MUID:21608551; PMID:11743194
A;Accession: H97637
A;Accession: H97637
A;Residues: DNA
A;Residues: L-228 < KUR>
A;Residues: L-228 < KUR>
A;Residues: L-228 < KUR>
A;Residues: L-228 < KUR>
A;Cyacos-references: UNIPROT:Q8UD14; GB:AE007869; PIDN:AAK88057.1; PID:g15157481; GSPDB:GC;Genetics:
                                                                                                                                                                                                                                                                    _4211 [imported] - Agrobacterium tumefaciens (strain C58, Cere
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                                                                                                                                                                                                                                                    Pothetical protein AGR_C 4211 [imported] - Agrobacterium tumefaciens (str. Species: Agrobacterium tumefaciens
Species: Agrobacterium tumefaciens
Date: 30-Sep-2001 #sequence_revision 30-Sep-2001 #text_change 09-Jul-2004
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Pred. No.
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A, Map position: circular chromosome
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54.5$;
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A,Molecule type: mRNA
Residues: 28-1315 <OHS>
A,Cross-references: EMBL:L22545
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     233 SLHNNYLTLPV 243
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Best Local Similarity
Matches 6; Conserv
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Aicross references: UNIPROT: P18962; EMBL:U10399; NID: 9500689; PIDN: AAB68879.1; PID: 95006

Fix Doberts, C.J.; Pohlig, G.; Rothman, J.H.; Stevens, T.H.

J. Cell Biol. 108, 1363-1373, 1989

A; Title: Structure, biosynthesis, and localization of dipeptidyl aminopeptidase B, an in-
A; Reference number: A30107; MUID: 89174971; PMID: 2647766

A; Molecule type: DNA

A; Mesiduae: 1-82, H; 44-124, N', 126-181, 'LRRLET', 189-199, N', 201-365, 'DFKRGKERKF', 376-5',
A; Note: the authors translated the codon ACC for residue 572 as Asn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A,Map position: 8R
C;Superfamily: dipeptidyl-peptidase IV
C;Keywords: dipeptidylpeptide hydrolase; glycoprotein; transmembrane protein; yeast vacu
E;30-45/Domain: transmembrane #status predicted <TMM>
F;63,79,110,139,392,421/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A,Status: preliminary
Modecule type: DNA
A,Residues: 1-208 <a href="mailto:agaza">a,Sazaza</a>
A,Cross-references: UNIPROT:Q01494, EMBL:U05236; NID:g523337; PIDN:AAA20542.1, PID:g5233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; Accession: 859950
R; Saupe, S.; Descamps, C.; Turcq, B.; Begueret, J.
R; Saupe, S.; Descamps, C.; Turcq, B.; Begueret, J.
Proc. Natl. Acad. Sci. U.S.A. 91, 5927-5931, 1994
A; Title: Inactivation of the Podospora anserina vegetative incompatibility locus het-c, A; Reference number: 859950; MUID:94286551; PMID:8016091
A; Accession: 859950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
C;Date: 07-Jun-1990 #sequence_revision 30-May-1997 #text_change 09-Jul-2004
C;Accession: S46780; A30107
R;Du, Z.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Species: Podospora anserina
Date: 15-Feb-1996 #sequence_revision 01-Mar-1996 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 38; DB 2; Length 208;
Pred. No. 10;
3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                              submitted to the EMBL Data Library, June 1994
A;Description: The sequence of S. cerevisiae cosmid 8082.
A;Reference number: S46773
A;Accession: Sassion: S46773
A;Molecule type: DNA
A;Residues: 1-818 < DUZ>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     38;
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A;Gene: SGD:DAP2; STE13; MIPS:YHR028c
A;Cross-references: SGD:S0001070; MIPS:YHR028c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 38.5;
Pred. No. 38
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S59950
het-c2 protein - Podospora anserina
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Best Local Similarity 63.6
Matches 7; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 PHNSYI-VLPI 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ||:|:| ||
PHHSFLVKPI 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 PHNSYIVLPI 11
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nes 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      145
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                                               A;Residues: 487-1512,'L',1514-1522,'F',1524-1683,'V',1685-1774 <CH2>
A;Cross-references: EMBL:L22545
A;Cross-references: EMBL:L22545
B;Abbc, N. ; Muragaki, T.; Yoshioka, H.; Inoue, H.; Ninomiya, Y.
Biochem: Biophys. Res. Commun. 196, 576-581, 1993
A;Title: Identification of a novel collagen chain represented by extensive interruptions A;Reference number: PN0675; MUID:94059075; PMID:8240330
A;Reference number: PN0675
A;Molecule type: mRNA
A;Residues: 635-1774 <ABE>
A;Molecule type: mRNA
A;Residues: 635-1774 <ABE>
A;Rein, Hintikka, E; Pihlajaniemi, T.
J. Biol. Chem. 269, 13329-13335, 1994
A;Title: Primary structure of the alphal chain of mouse type XVIII collagen, partial str
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C;Comment: The different splice forest of collagen alpha 1(XVIII) may be involved in peri C;Comment: Endostatin is released from collagen alpha 1(XVIII) chain by the action of un by be useful in treating solid tumors.
C;Genetics:
A;Gene: MGI:Coll8al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: MGI:71175
A;Map position: 10:41.0
A;Map position: 10:41.0
A;Introns: 125/3; 1310/1; 1345/3; 1388/3; 1437/1; 1461/3; 1505/3; 1516/3; 1599/
A;Introns: 125/3; 1310/1; 1331/1; 1345/3; 1388/3; 1437/1; 1461/3; 1505/3; 1516/3; 1599/
A;Note: the list of introns is incomplete
C;Keywords: alternative splicing; angiogenesis inhibitor; chondroitin sulfate proteoglyc
F;1-174/Froduct: collagen alpha 1(XVIII) chain precursor, long splice form #sfatus predicted <SIG>F;1-24/Domain: signal sequence #status predicted <SIG>F;86-812/Domain: collagenous #status predicted <COO1>F;823-896/Domain: collagenous #status predicted <COO1>F;823-896/Domain: collagenous #status predicted <COO2>F;821-1042/Domain: collagenous #status predicted <COO3>
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A; Residues: 1591-1610 < ORE>
A; Residues: 1591-1610 < ORE>
A; Residues: 1591-1610 < ORE>
A; Note: inhibits endothelial cell proliferation
C; Comment: Prolines and lysines at the third position of the tripeptide repeating unit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ajaccession: A54072
A;Molecule type: DNA; mRNA
A;Cross-references: GB:U03714; NID:9487733; PIDN:AAA20657.1; PID:9487734
B;O'Reilly, M.S.; Boehm, T.; Shing, Y.; Fukai, N.; Vasios, G.; Lane, W.S.; Flynn, E.;
Cell 80; 277-285; 1997
A;Title: Endostatin: an endogenous inhibitor of angiogenesis and tumor growth.
A;Reference number: A58816; MUID:97160848; PMID:9008168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                F/921-1046/Domain: collagenous #status predicted <CCO3-
F/106-1149/Domain: collagenous #status predicted <CCO3-
F/1163-1204/Domain: collagenous #status predicted <CCO6-
F/1218-1290/Domain: collagenous #status predicted <CCO6-
F/1310-1333/Domain: collagenous #status predicted <CCO6-
F/1351-1353/Pomain: collagenous #status predicted <CCO0-
F/137-1428/Domain: collagenous #status predicted <CCO0-
F/137-1429/Domain: collagenous #status predicted <CCO0-
F/142-1459/Domain: collagenous #status predicted <CCO0-
F/142-1459/Domain: collagenous #status predicted <CCO0-
F/142-1459/Domain: collagenous #status predicted <CCI0-
F/138-1774/Region: multiplexin collagen carboxyl-terminal homologous
F/159-1774/Region: multiplexin collagen carboxyl-terminal homologous
F/159-1774/Binding site: carbohydrate (Ser) (covalent) #status predicted
F/990,704,1716/Binding site: chondroitin sulfate (Ser) (covalent) #status predicted
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Pred. No. 72;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
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Best Local Similarity 81.8%;
Matches 9; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       collagen chain.
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M.J.; B1 K.; Lim,

C;Accession: D83455
R;Stover, C.K.; Pham, X.Q.; Erwin, A.L.; Mizoguchi, S.D.; Warrener, P.; Hickey, Stover, S.Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Larbig, J. Lory, S.; Olson, M.V.

dipeptidyl aminopeptidase B (EC 3.4.14.-) - yeast (Saccharomyces cerevisiae) $N_i Alternate$ names: protein YHR028c C; Species: Saccharomyces cerevisiae

1 SPHNSYIVLPI 11 | | | | | | | | | | | 1 1754 SCHNSYIVLCI 1764

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RESULT 10

hypothetical protein PA1513 [imported] - Pseudomonas aeruginosa (strain PAO) C;Species: Pseudomonas aeruginosa C;Date: 15-Sep_2000 #sequence_revision 15-Sep-2000 #text_change 09-Jul-2004

RESULT 12

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Search completed: March 10, 2005, 11:10:07 Job time : 10.5526 secs
                                                      3 HNSYIVLPI 11
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R;Zhang, S.; Diener, T.O.

submitted to the EMBL Data Library, February 1997

A;Description: Isolation and characterization of seven serine/threonine protein kinase-6

A;Reference number: 216191

A;Accession: T0780

A;Status: preliminary; translated from GB/EMBL/DDBJ

A;Accession: T0780

A;Status: preliminary; translated from GB/EMBL/DDBJ

A;Residues: 1-102 < CHA>

A;Residues: 1-102 < CHA>

A;Cross-references: UNIPROT:049991; EMBL:U89682; NID:g2735253; PIDN:AAB93863.1; PID:g273

A;Genetics:

C;Genetics:

C;Superfamily: protein kinase homology
                                  A;Title: Complete genome sequence of Pseudomonas aeruginosa PAO1, an opportunistic pathd A;Reference number: A82950; MUD:20437337; PMID:10984043
A;Reference number: A82950; MUD:20437337; PMID:10984043
A;Accession: D83455
A;Status: preliminary
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-425 <STO>
A;Cross-references: UNIPROT:Q913KO; GB:AE004580; GB:AE004091; NID:g9947468; PIDN:AAG0490
C;Genetics:
A;Gene: PA1513
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(C)Accession: F83813
(E)Accession: F83813
(E)ACCESSI
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A,Cross-references: UNIPROT:Q9KDA4; GB:AP001511; GB:BA000004; NID:g10173727; PIDN:BAB05d
A,Experimental source: strain C-125
C,Genetics:
A,Gene: pssA
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C;Species: Lycopersicon esculentum (tomato)
C;Date: 14-May.1999 #sequence_revision 14-May-1999 #text_change 16-Aug-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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Pred. No. 23;
2; Mismatches
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C;Superfamily: protein kinase homology
C;Keywords: phosphotransferase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 54.5%;
Matches 6; Conservative
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45 TPRNSYCAMPI 55
Nature 406, 959-964, 2000
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Ricole, S.T.; Brogch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Gordon, C.; Comor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Holroyd, S. Rajandream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S. Nature 393, 537-544, 1998
A;Authors: Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G. A;Reference number: Afology of Mycobacterium tuberculosis from the complete genome A;Reference number: A70500; MUID:98295987; PMID:9634230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary; nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-264 <COL>
A;Cross-references: GB:Z97050; GB:AL123456; NID:g3256008; PIDN:CAB09759.1; PID:e323021;
A;Experimental source: strain H37Rv
C;Genetics:
                                                                                                                                                                         probable transcription regulator Rv0165c - Mycobacterium tuberculosis (strain H37RV) C;Specias: Mycobacterium tuberculosis C;Decles: Mycobacterium tuberculosis C;Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 22-Oct-1999 C;Accession: H70903
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Pred. No. 21;
3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 50.0
Matches 5; Conservative
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117 PHRGHVVLPL 126
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129 HNSFIGLPI 137
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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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March 10, 2005, 11:07:00 ; Search time 66.8684 Seconds (without alignments) 54.260 Million cell updates/sec
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                                                                                                                                                                                                                                           1396920 segs, 329844858 residues
OM protein - protein search, using sw model
                                                                                                                                                                                   BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                      US-09-766-412-29
59
                                                                                                                                               1 SPHNSYIVLPI 11
                                                                                                                                                                                     Scoring table:
                                                                                                            Title:
Perfect score:
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                                  Run on:
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Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Published Applications AA:*

1: /cgn2_6/ptodata/2/pubpaa/VSO7_PUBCOMB.pep:*
2: /cgn2_6/ptodata/2/pubpaa/NEG NEW PUB.pep:*
4: /cgn2_6/ptodata/2/pubpaa/NEG NEW PUB.pep:*
4: /cgn2_6/ptodata/2/pubpaa/USO6_NEW PUB.pep:*
5: /cgn2_6/ptodata/2/pubpaa/NEGOF NEW PUB.pep:*
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19: /cgn2_6/ptodata/2/pubpaa/USOB_PUBCOMB.pep:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	Sequence 29, Appl	Seguence 48112, A	Sequence 46, Appl	Sequence 18, Appl		K	Sequence 13, Appl	Sequence 3451, Ap	Sequence 8451, Ap	Sequence 2, Appli	Sequence 3, Appli	Sequence 71, Appl	Sequence 4956, Ap
	ID	US-09-766-412-29	US-10-282-122A-48112	US-10-131-241-46	US-10-292-418-18	US-10-920-820-13	US-09-998-831-13	US-10-373-561-13	US-10-128-714-3451	US-10-128-714-8451	US-09-373-938-2	US-10-080-797-3	US-10-422-934-71	US-09-815-242-4956
	DB	6	15	14	14	17	0	14	14	14	σ	13	14	σ
	Query Match Length DB ID		638	184	184	184	191	191	201	201	207	207	207	455
ф	Query Match	100.0	67.8	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1
	Score	59	40	39	39	39	39	39	39	39	39	39	39	39
	Result No.		7	m	4	ι.	9	7	ω	σ	10	11	12	13

Sequence 72515, A	1 0	'n	•••	,	٠,	•••	•	1.1	N	~	4		equence		_	1140	w		64349,	62628	18	16	~	4	Sequence 6, Appli	œ	73	29		Sequence 13774, A
US-10-282-122A-72515	S-10-282-122A-42	-10-401-	10-402-312-	-10-402-067-	-10-401-436-	-10-369-493-	US-10-424-599-280514	-10-767-7	-10-424-	-10-424-599-	-10-282-	-10-424-599-	0-425-114-	-10 - 767	-10-424-59	-10-437-9	-10-282-1	-10 - 282 - 1	0 - 282 - 1	-10-282-122A-6262	-10-437-96	-10-240-145-16	10-385-136-	-10-385-1	-10-385-13	10-385-1	-10-282-1	-10-282-122A-5961	8-10-282-1	US-09-815-242-13774
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466	472	818	818	818	818	818	81	175	199	439	628	59	81	81	89	163	227	245	264	265	330	377	442	442	442		448	451	465	475
66.1	66.1	65.3	65.3	65.3	65.3	65.3	64.4	64.4	64.4	64.4	64.4	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7		62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
39	9 6	8	8	œ.	38.5	8	38	38	38	38	38	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
4,4	16	17	18	19	20	21	22	23	24	25	56	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

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Sequence 11. Application US/09766412

Patent No. US20020103129A1

BERNEAL INFORMATION:
APPLICANT: GENERAL INFORMATION:
TITLE OF INVENTION: SMALL PEPTIDES HAVING ANTI-ANGIOGENIC AND ENDOTHELIAL CELL INHIB
TITLE OF INVENTION: ACTIVITY
TITLE REPERENCE: 1781-0215P
CURRENT APPLICATION NUMBER: US/09/766,412
CURRENT PILING DATE: 2001-01-11
NUMBER OF SEQ ID NOS: 50
SOFTWARE: Patentin version 3.1
SEQ ID NO 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 2
US-10-282-122A-48112
; Sequence 48112, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc feature;
CTHER INFORMATION: Endo-1
US-09-766-412-29
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                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Mammalian
RESULT 1
US-09-766-412-29
                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
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Sequence 13, Application US/10920820
Publication No. US20050009144A1
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND TREATING DISORDERS;
TITLE OF INVENTION: INVOLVING MANDIOGENESIS
TITLE OF INVENTION:
TOTAL OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
TOTAL OF INVENTION:
THORY FILLING DATE: 2001-08-24
THOM PRILING DATE: 2000-08-25
TOTAL OF INVENTION:
TOTAL 
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APPLICANT: Lo, Kin-Ming
APPLICANT: Li, Yue
TITLE OF INVENTION: Expression and Export of Angiogenesis Inhibitors as
TITLE OF INVENTION: Immunofusins
FILE REFERENCE: LEX-006CI
CURRENT APPLICATION NUMBER: US/10/292,418
PRIOR PLING DATE: 2002-11-12
PRIOR PLING DATE: 1999-08-12
PRIOR FILING DATE: 1999-08-12
NUMBER: OF SEQ ID NOS: 54
SOFTWARE: PATENTIN VOR: 2.0
                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                  Score 39; DB 14; Length 184; Pred. No. 65; 2; Indels 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 39; DB 14; Length 184;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. 65;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 18, Application US/10292418; Publication No. US20030139365A1; GENERAL INFORMATION:
SOFTWARE: PatentIn version 3.1 SEQ ID NO 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   66.1%;
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                                                                                                                                                                                                                                            Query Match
Best Local Similarity 81.8
Matches 9, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           164 SCHNSYIVICI 174
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ORGANISM: Mus musculus
US-10-292-418-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      164 SCHNSYIVLCI
                                                                                                             ; TYPE: PRT
; ORGANISM: Murinae sp.
US-10-131-241-46
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-292-418-18
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US-10-920-820-13
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LENGTH: 184
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LENGTH: 184
                                                                                        LENGTH:
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APPLICANT: Fortier, Anne H.
APPLICANT: Fortier, Anne H.
APPLICANT: Fortier, Anne H.
TITLE OF INVENTION: Composition and Methods for Inhibiting Endothelial Cell Prolifer TITLE OF INVENTION: US REQUIATING Angiogenesis Using Cancer Markers
FILE REFERENCE: 05213-0344 43170-271565
CURRENT APPLICATION NUMBER: US/10/131,241
PRIOR APPLICATION NUMBER: US 09/413,049
PRIOR APPLICATION NUMBER: US 09/413,049
PRIOR APPLICATION NUMBER: US 09/316,802
PRIOR APPLICATION NUMBER: US 60/086,586
PRIOR FILING DATE: 1999-05-21
PRIOR FILING DATE: 1998-05-22
NUMBER OF SEO ID NOS: 65
                                                                                                                                                                                                                                                                                                                        APPLICANT: Carr, Grant
APPLICANT: Carr, Grant
APPLICANT: Porsyth, R.
APPLICANT: Van H.
APPLICANT: Van H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITRA.034
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-02-20
PRIOR PLING DATE: 2000-05-23
PRIOR FILING DATE: 2000-05-24
PRIOR FILING DATE: 2000-05-26
PRIOR FILING DATE: 2000-05-26
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PRIOR FILING DATE: 2000-05-66
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PRIOR PLILING DATE: 2000-12-6
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PRIOR PLILING DATE: 2001-00-16
PRIOR PLILING DATE: 2000-10-67
PRIOR PLILI
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Pred. No. 1.6e+02;
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                         Zamudio, Carlos
Malone, Cheryl
Haselbeck, Robert
Ohlsen, Kari
Zyskind, Judith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Burkholderia cepacia
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Best Local Similarity 63.6%;
Matches 7; Conservative
                                                                                                                                                                                                                           Wall, Daniel
Trawick, John
Carr, Grant
Yamamoto, Robert
Forsyth, R.
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151 TPHLSHLVLPI 161
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171 SCHNSYIVLCI 181

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Score 39;

Query Match

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138 PHHSFVVKPI 147
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LENGTH: 201
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Publication No. US20030175276A1

GENERAL INFORMATION:

APPLICANT: Philip E. Thorpe

APPLICANT: Philip E. Thorpe

TITLE OF INVENTION: ANTIBODY METHODS FOR SELECTIVELY INHIBITING VEGF

PILE REPERBENCE: 2003-02-24

CURRENT APPLICATION NUMBER: US/10/373,561

CURRENT PILING DATE: 2000-04-28

PRIOR PILING DATE: 2000-04-28

PRIOR PILING DATE: 1999-04-28

PRIOR PILING DATE: 1999-04-28

NUMBER OF SEQ ID NOS: 44

SEQ ID NO 13

LENGTH: 191

LENGTH: 191

LENGTH: 191

LENGTH: 191

LENGTH: 191
                                                                                                                                                                                                                      Sequence 13, Application US/0999831

Patent No. US20020119153A1

GENERAL INFORMATION:

APPLICANT: Philip E. Thorpe

APPLICANT: Rolf A. Brekken

TITLE OF INVENTION: HALIATING VEGF

TITLE OF INVENTION: HALIATING VEGF

TITLE OF INVENTION: HALIATING VEGF

CURRENT APPLICATION NUMBER: US/09/998,831

CURRENT FILING DATE: 2001-11-30

PRIOR APPLICATION NUMBER: 09/561,108

PRIOR PLILING DATE: 2000-04-28

NUMBER OF SEQ ID NOS: 44

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 13

LENGTH: 191
                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Description of Artificial Sequence: SYNTHETIC US-09-998-831-13
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DB 17; Length 184;
65;
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Pred. No. 68;
0; Mismatches 2; Indels
                                          Indele
                    Pred. No. 65;
0; Mismatches
66.1%;
81.8%;
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Best Local Similarity 81.8%;
Matches 9; Conservative (
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                  Best Local Similarity 81.8
Matches 9; Conservative
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                                                                                                                           164 SCHNSYIVLCI 174
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                                                                                   1 SPHNSYIVLPI 11
                                                                                                                                                                                                               US-09-998-831-13
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1 SPHNSYIVLPI 11

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APPLICANT: Tishkoff, Daniel
APPLICANT: Tishkoff, Daniel
APPLICANT: Tishkoff, Daniel
APPLICANT: Tishkoff, Daniel
APPLICANT: Examudio, Carlos
APPLICANT: Excenkin, Alexey M
APPLICANT: Excenkin, Alexey M
APPLICANT: Lemieux, Sebastien M
TITLE OF INVENTION: Identification of Essential Genes in Aspergillus fumigatus and
TITLE OF INVENTION: Methods of Use
FILE REFERENCE: 10182-018-99
FILE REFERENCE: 10182-018-99
CURRENT FILING DATE: 2001-04-23
PRIOR APPLICATION NUMBER: US 60/285,697
PRIOR APPLICATION NUMBER: US 60/287,066
PRIOR FILING DATE: 2001-04-27
PRIOR FILING DATE: 2001-04-27
PRIOR FILING DATE: 2001-06-05
PRIOR FILING DATE: 2001-07-09
PRIOR FILING DATE: 2001-07-09
PRIOR FILING DATE: 2001-08-31
NUMBER OF SEQ ID NOS: 8603
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Pred. No. 72;
3; Mismatches 1; Indels
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Sequence 8451, Application US/10128714
Publication No. US20030119013A1
GENERAL INFORMATION:
APPLICANT: Jiang, Bo
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US-10-128-714-3451
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Best Local Similarity 60.0%;
Matches 6; Conservative
Sequence 3451, Application US/1
Publication No. US20030119013A
GENERAL INFORMATION:
APPLICANT: Jiang, Bo
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APPLICANT: Kadan, Michael
APPLICANT: Kadan, Michael
APPLICANT: Beerli, Roger
TITLE OF INVENTION: LIGAND ACTIVATED TRANSCRIPTIONAL REGULATOR PROTEINS
FILE REFERENCE: 22908-1227C
CURRENT APPLICATION NUMBER: US/10/422,934
CURRENT APPLICATION NUMBER: 09/586,625
PRIOR APPLICATION NUMBER: 09/586,625
PRIOR FILING DATE: 2000-06-02
PRIOR FILING DATE: 1999-10-25
NUMBER OF SEQ ID NOS: 92
SOFTWARE: PATENTIN VOICE: 20
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Pred. No. 74;
0; Mismatches 2; Indels
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APPLICANT: Zyskind, Judith W.
APPLICANT: Zyskind, Judith W.
APPLICANT: Trawick, John D.
APPLICANT: Garr, Grand J.
APPLICANT: Garr, Grand J.
APPLICANT: Xu, H. Howard
APPLICANT: Xu, H. Howard
TITLE OF INVENTION: Identification of Essential Genes in
TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITRA.011A
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CURRENT FILING DATE: 2001-03-21
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SOFTWARE: FastSEQ for Windows Version 4.0
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PRIOR APPLICATION NUMBER: 60/191,078

PRIOR PILING DATE: 2000-03-21

PRIOR PILING DATE: 2000-03-21

PRIOR PELING DATE: 2000-05-23

PRIOR PELING DATE: 2000-05-26

PRIOR PILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: 60/242,578

PRIOR APPLICATION NUMBER: 60/253,625

PRIOR PILING DATE: 2000-11-27

PRIOR PILING DATE: 2000-11-27

PRIOR PILING DATE: 2000-12-22

PRIOR PILING DATE: 2000-12-22
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                                                                 Sequence 71, Application US/10422934; Publication No. US20030186841A1
GENERAL INFORMATION:
                                                                                                                                    APPLICANT: Barbas, Carlos F., III
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Haselbeck, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 81.8
Matches 9; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 71
LENGTH: 207
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Publication No. US20020115202A1

GENERAL INFORMATION:

BAPLICANT: Hallenbeck, Paul

APPLICANT: Chen, Cheauyun Theresa

TITLE OF INVENTION: ADENOVIRAL VECTORS INCLUDING DNA SEQUENCES ENCODING ANGIOGENIC IN
FILE REFERENCE: 4-3089991

CURRENT FILIAND DATE: 1999-08-13

NUMBER OF SEQ ID NOS: 17

SOFTWARE: Patentin version 3.1
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Pred. No. 72;
3; Mismatches 1; Indels
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Pred. No. 74;
0; Mismatches 2;
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Publication No. US20020183253A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Campochiaro, Peter A.
APPLICANT: Dixon, Katharine H.
APPLICANT: Brazzell, Romulus K.
TITLE OF INVENTION: METHOD FOR TREATING OCULAR
TITLE OF INVENTION: MECVASCULARIZATION
FILE REFERENCE: 4.31881A
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CURRENT FILING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 21
SEQ ID NO 3
LENGTH: 207
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Pred. No.
                                                              TYPE: PRT CRGANISM: Aspergillus fumigatus US-10-128-714-8451
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60.0%;
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81.8%;
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SOFTWARE: PatentIn version 3.1
                                                                                                                                                       Query Match 66.1
Best Local Similarity 60.0
Matches 6; Conservative
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Best Local Similarity 81.8
Matches 9; Conservative
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187 SCHNSYIVLCI 197
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138 PHHSFVVKPI 147
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US-09-373-938-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 9; Conserv
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US-10-080-797-3
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LENGTH: 207
TYPE: PRT
                    SEQ ID NO 8451
LENGTH: 201
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US-10-080-797-3
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Gaps

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Search completed: March 10, 2005, 11:15:26 Job time : 67.8684 secs
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APPLICANT: Yamamoto, Robert
APPLICANT: Yamamoto, Robert
APPLICANT: Yamamoto, Robert
APPLICANT: You, H.
TITLE ON INVERTION: Identification of Essential Genes in Microorganisms
FILE REPERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2000-03-21
PRIOR FILING DATE: 2000-03-21
PRIOR PILING DATE: 2000-05-26
PRIOR PILING DATE: 2000-09-06
PRIOR PILING DATE: 2000-09-06
PRIOR PILING DATE: 2000-09-09
PRIOR PILING DATE: 2000-09-09
PRIOR PILING DATE: 2000-09-09
PRIOR PILING DATE: 2000-10-23
PRIOR PILING DATE: 2000-11-27
PRIOR PILING DATE: 2000-11-27
PRIOR PILING DATE: 2000-12-22
PRIOR PILING DATE: 2001-12-22
PRIOR PILING DATE: 2001-12-24
PRIOR PILING DATE: 2001-12-24
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NUMBER OF SEQ ID NOS: 78614
SOFTWARE: PatentIn version 3.1
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                           Length 455;
Score 39; DB 9; Lengtn acc., Pred. No. 1.76+02;
                                                                                                                                                                                                                                                                                       RESULT 14
US-10-282-122A-72515
; Sequence 72515, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
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US-10-282-122A-72515
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyskind, Judith
APPLICANT: Wall, Daniel
                           Query Match
Best Local Similarity 45.5%;
Matches 5; Conservative
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Carr, Grant
Yamamoto, Robert
Forsyth, R.
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Best Local Similarity 45.5
Matches 5; Conservative
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418 APHGGFLVLPV 428
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421 APHGGFLVLPV 431
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US-09-815-242-10778
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Gaps
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                                                                                                   APPLICANT: Xu, Howard
TITLE OF INVENTION: Identification of Essential Genes in
TITLE OF INVENTION: Prokaryotes
FILE REPRENCE: ELITRA.011A
CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT PAPLICATION NUMBER: 60/191,078
PRIOR PILING DATE: 2000-03-21
PRIOR PELICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR FILING DATE: 2000-05-23
PRIOR PILING DATE: 2000-05-24
PRIOR PRILING DATE: 2000-05-26
PRIOR PILING DATE: 2000-10-23
PRIOR FILING DATE: 2000-11-27
PRIOR PILING DATE: 2000-12-22
PRIOR FILING DATE: 2000-12-27
PRIOR PILING DATE: 2000-12-27
PRIOR FILING DATE: 2000-12-27
PRIOR FILING DATE: 2000-12-27
PRIOR FILING DATE: 2001-02-16
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Pred. No. 1.7e+02;
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SOPTWARE: FastSEQ for Windows Version 4.0
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US-09-815-242-10778
Wall, Daniel
Trawick, John D.
Carr, Grant J.
Yamamoto, Robert T.
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Best Local Similarity 45.5%;
Matches 5; Conservative
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422 APHGGFLVLPV 432
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Sequence 13, Appl
Sequence 2, Appli
Sequence 5609, Ap
Sequence 3, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 6, Appli
Sequence 6, Appli
Sequence 6, Appli
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3, Appli
3, Appli
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Sequence 40030, 1
Sequence 55246, 1
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                                                          March 10, 2005, 11:04:09 ; Search time 22.2895 Seconds (without alignments) 36.840 Million cell updates/sec
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/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/Re_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PcTUS_COMB.pep:*
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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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US-09-918-91A-13
US-09-561-108-13
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US-09-561-409-13
US-09-561-409-13
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US-09-561-408-13
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US-09-561-408-13
US-09-561-408-13
US-09-767-408-14
US-09-787-083-4
US-09-787-083-6
US-09-787-083-6
US-09-787-083-6
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US-09-270-767-53530
US-09-702-705-1677
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US-09-270-767-40030
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Maximum Match 100%
Listing first 45 summaries
                                        - protein search, using sw model
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Maximum DB seq length: 200000000
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59
1 SPHNSYIVLPI 11
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Match Length
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| Patent No. 6200954
| GENERAL INFORMATION
| APPLICANT: Ge, Ruowen
| APPLICANT: Kini, R. Manjunatha
| TITLE OF INVENTION: Small Peptides Having Potent Anti-Anglogenic Activity
| TITLE OF INVENTION NUMBER: US/09/385,442
| CURRENT APPLICATION NUMBER: 60/099,313
| CURRENT PILING DATE: 1999-09-04
| NUMBER OF SEQ ID NOS: 50
| SOFTWARE: PatentIn Ver. 2.0
| SEQ ID NO 29
| LENGTH: 11
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Patent No. 6703491

GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster FILE REPERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 48510
LENGTH: 140
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US-09-736-457-1677
US-09-671-325-1677
US-09-658-824-12683
US-09-902-540-12683
US-08-916-917-2
US-08-917-2
US-08-972-630-2
US-08-972-630-2
US-08-972-630-2
US-09-972-630-2
US-09-225-170-2
US-09-225-170-2
US-09-107-5328-5785
US-09-107-5328-5785
US-09-248-796A-24504
US-09-248-796A-24504
US-09-3134-000C-5244
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Best Local Similarity 100.
Matches 11; Conservative
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US-09-385-442-29
  1 SPHNSYIVLPI 11
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US-09-270-767-48510
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US-09-385-442-29
    FEATURE:
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; ORGANISM: Drosophila melanogaster US-09-270-767-48510 ö

Gaps

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Length 184; Indels

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PRIOR APPLICATION NUMBER: US PROV NO. 60/227,924
PRIOR FILING DATE: 2000-08-25
NUMBER OF SEQ ID NOS: 15
SOFTWARE: Patentin version 3.2
SEQ ID NO 13
LENGTH: 184
TUDE: ...
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red. No. 16;
Mismatches
                                                                                                                                                                                                                  Score 39;
Pred. No. 1
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; Sequence 13, Application US/09561500
; Patent No. 6342219
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81.8%;
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ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                    66.1%;
81.8%;
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                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                             164 SCHNSYIVLCI 174
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Best Local Similarity
Matches 9; Conserv
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US-09-938-391A-13
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US-09-561-108-13
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LENGTH: 191
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                                                                                                                                                 TYPE: PRT
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APPLICANT: Pfizer, Inc. and Pfizer Products, Inc.
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND TREATING DISORDERS
TITLE OF INVENTION: INVOLVING ANGIOGENESIS
FILE REFERENCE: 3153.00234/PC10790A
CURRENT APPLICATION NUMBER: US/09/938,391A
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Sequence 55246, Application US/09270767

Patent No. 6703491

GENERAL INFORMATION:

TILLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster:

FILLE REFERENCE: File Reference: 7326-094

CURRENT APPLICATION NUMBER: US/09/270, 767

CURRENT FILING DATE: 1999-03-17

NUMBER OF SEQ ID NOS: 62517

SOFTWARE: Patentin Ver. 2.0

LENGTH: 151
                                                                                                                                                                                                       US-09-270-767-40030

Sequence 40030, Application US/09270767

Sequence 40030, Application US/09270767

Patent No. 6703491

GENERAL INFORMATION:

APPLICANT: Homburger et al.

TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster;

FILE REFERENCE: File Reference: 7326-094

CURRENT FILING DATE: 199-03-17

NUMBER OF SEQ ID NOS: 62517

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 40030

LENGTH: 151
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Pred. No. 13;
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Pred. No. 13;
3; Mismatches 1; Indela
                           DB 4; Length 140;
12;
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                                                                Mismatches
                               Score 39;
Pred. No.
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18-08-398-391A-13
Sequence 13, Application US/09938391A
; Patent No. 6803211
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US-09-270-767-40030
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60.0%;
                             Query Match
Best Local Similarity 87.5%;
Matches 7; Conservative
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Best Local Similarity 60.0%;
Matches 6; Conservative
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82 SPHNNHVNLP 91
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Best Local Similarity
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116 NSYVVLPI 123
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Sequence 13, Application US/09561108

Patent No. 6342221

GREERAL INFORMATION:
APPLICANT: Philip E. Thorpe
APPLICANT: Rolf A. Brekken
TITLE OF INVENTION:
TITLE OF INVENTION: ANTIBODY CONJUGATE COMPOSITIONS FOR SELECTIVELY INHIBITING VEGF
TITLE APPLICATION NUMBER: US/09/561,108
CURRENT FILING DATE: 2000-04-28
PRIOR PRILICATION NUMBER: 60/131,432
PRIOR PRILING DATE: 1999-04-28
NUMBER OF SEQ ID NOS: 44
SOFUMARE: Patentin Ver. 2.0
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APPLICANT: Philip E. Thorpe
APPLICANT: Rolf A. Brekken
TITLE OF INVENTION: ANTHRODY COMPOSITIONS FOR SELECTIVELY INHIBITING VEGF
FILE REFERENCE: 4001.002500
CURRENT APPLICATION NUMBER: US/09/561,500
CURRENT FILING DATE: 2000-04-28
PRIOR PILING DATE: 1999-04-28
NUMBER OF SEQ ID NOS: 44
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Description of Artificial Sequence: SYNTHETIC
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Pred. No. 17;
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US-09-561-108-13

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US-09-561-005-13
                       US-09-998-831-13
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Sequence 13, Application US/09561526

Sequence 13, Application US/09561526

GENERAL INFORMATION:
APPLICANT: Philip E. Thorpe
APPLICANT: Rolf A. Breken
TITLE OF INVENTION: ANTIBODY CONUGATE KITS FOR SELECTIVELY INHIBITING VEGF
FILE REFERENCE: 4001.00236
CURRENT FILING DATE: 2000-04-28
CURRENT FILING DATE: 1999-04-28
NUMBER OF SEQ ID NOS: 44
SOFTWARE: PALCHING VEGE: PALCHING VEGE: PALCHING VEGE: 1999-04-28
NUMBER OF SEQ ID NOS: 44
SEQ ID NO 13
LENGTH: 191
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APPLICANT: Philip E. Thorpe
APPLICANT: Philip E. Thorpe
APPLICANT: Rolf A. Brekken
TITLE OF INVENTION: ANTIBODY METHODS FOR SELECTIVELY INHIBITING VEGF
FILE REPERBNCE: 4001.002582
CURRENT FILIM DATE: 2000-04-28
PRIOR APPLICATION NUMBER: 0S/09/561,499
PRIOR APPLICATION NUMBER: 60/131,432
PRIOR PILING DATE: 1999-04-28
NUMBER OF SEQ ID NOS: 44
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 13
LENGTH: 191
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Score 39; DB 3; Length 191;
Pred. No. 17;
0; Mismatches 2; Indels
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Pred. No. 17;
0; Mismatches 2; Indels
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Patent No. 6524583
    66.1%;
81.8%;
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ORGANISM: Artificial Sequence
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Best Local Similarity 81.8%;
Matches 9; Conservative
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    Query Match
Best Local Similarity 81.8
Matches 9; Conservative
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                                                                                    1 SPHNSYIVLPI 11
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Sequence 13, Application US/09561005
Sequence 13, Application US/09561005
Patent No. 6703020
GENERAL INFORMATION:
APPLICANT: Rolf A. Brekken
APPLICANT: Rolf A. Brekken
ATTILE OF INVENTION: ANTHEODY CONJUGATE METHODS FOR SELECTIVELY INHIBITING VEGF
FILE REFERENCE: 4001.002585
CURRENT APPLICATION NUMBER: US/09/561,005
PRIOR PILING DATE: 1999-04-28
NUMBER OF SEQ ID NOS: 44
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 13
LENGTH: 191
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Sequence 13, Application US/09998831

Sequence 13, Application US/09998831

GENERAL INFORMATION:

APPLICANT: Philip E. Thorpe

APPLICANT: Rolf A. Brekken

TITLE OF INVENTION: ANTIBODY CONJUGATE COMPOSITIONS FOR SELECTIVELY

TITLE OF INVENTION: ANTIBODY CONJUGATE COMPOSITIONS FOR SELECTIVELY

TITLE OF INVENTION: ANTIBODY CONJUGATE COMPOSITIONS FOR SELECTIVELY

TITLE OF INVENTION: AND SER 10/09/998,831

CURRENT FILING DATE: 2001-11-30

PRIOR APPLICATION NUMBER: 09/561,108

NUMBER OF SEQ ID NOS: 44

SOFTWARE: PATENTIN VET. 2.0

SEQ ID NO 13

LENGTH: 191
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; OTHER INFORMATION: Description of Artificial Sequence: SYNTHETIC
US-09-998-831-13
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Pred. No. 17;
0; Mismatches
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US-08-159-784-2
; Sequence 2, Application US/08159784
; Patent No. 5643783
; GENERAL INFORMATION:
; APPLICANT: Bjorn R. Olsen
                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT ORGANISM: Artificial Sequence
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81.8%;
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Best Local Similarity 81.0
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181 APHGGFLVLPV 191

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TITLE OF INVENTION: NOVEL COLLAGEN AND USES THEREOF

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JULIANCE J. Application US/10402312

Patent No. 6833261

GENERAL INFORMATION:

APPLICANT: Estell, David A.

TITLE OF INVENTION: Proceases From Gram-Positive Organisms
FILE REFERENCE: GC382-US

CURRENT APPLICATION NUMBER: US/10/402,312

CURRENT FILING DATE: 2003-03-26

PRIOR APPLICATION NUMBER: PCT/US98/14647

PRIOR APPLICATION NUMBER: PCT/US98/14647

PRIOR APPLICATION NUMBER: EP 97305237.7

PRIOR PILING DATE: 1998-07-15

NUMBER OF SEQ ID NOS: 10

SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 3

LENGTH: 818
                                                                                                                           GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Proceases From Gram-Positive Organisms;
TITLE OF INVENTION: Proceases From Gram-Positive Organisms;
FILE REFERENCE: G232-US
CURRENT APPLICATION NUMBER: US/09/462,845
CURRENT FILING DATE: 2000-01-13
PRIOR FILING DATE: 1998-07-14
PRIOR APPLICATION NUMBER: EP 97305237.7
PRIOR RELICATION NUMBER: EP 97305237.7
PRIOR PRIOR DATE: 1998-07-15
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FastSEQ for Windows Version 3.0
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Pred. No. 98;
2; Mismatches 1;
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                                                                                  ; Sequence 3, Application US/09462845; Patent No. 6723550
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Best Local Similarity 63.0
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Best Local Similarity 65...
7; Conservative
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US-10-402-312-3
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                                           RESULT 14
US-09-462-845-3
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                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
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Sequence 5609, Application US/09134000C

Sequence 5609, Application US/09134000C

Batent No. 6617156

GENERAL INFORMATION:

TITLE OF INVENTION: NUTLEIC ACID AND AMINO ACID SEQUENCES RELATING TO

TITLE OF INVENTION: EXPTEROCOCCUS FAECALIS FOR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: DATE: 1998-08-13

CURRENT APPLICATION NUMBER: US/09/134,000C

CURRENT FILING DATE: 1998-08-13

PRIOR PILING DATE: 1997-08-15

NUMBER OF SEQ ID NOS: 6812

SOFTWARE: PatentIn version 3.1

LENGTH: 231
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Pred. No. 17;
0; Mismatches 2; Indels
                                                                                                                                                                                              MEDIUM TYPE: 3.5" Diskette, 1.44 Mb COMPUTER: 1BM PS/2 Model 50Z or 55SX OPERATING SYSTEM: MS-DOS (Version 5.0) SOFTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION DATA: WS/08/159,784 FILING DATE: December 1, 1993 CLASSIFICATION: 530 PRIOR APPLICATION: 530 PRIOR APPLICATION NUMBER: APPLICATION NUMBER: FILING DATE: ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATIONNEL JOHN F. Freeman
NAME: JOHN F. Freeman
REGISTRATION NUMBER: 29,066
REPERSINCE DOCKET NUMBER: 0024
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
                                             Richardson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT
; ORGANISM: Enterococcus faecalis
US-09-134-000C-5609
                                                                225 Franklin Street
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Best Local Similarity 81.8%;
Matches 9; Conservative (
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INFORMATION FOR SEQ 1D NO:
SEQUENCE CHARACTERISTICS:
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                                                                                                              Massachusetts
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Ri
                                                                                                                                  COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid STRANDEDNESS: N/
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US-08-159-784-2
                                                                                         Boston
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TELEX: 20
                                                                STREET:
CITY: BC
STATE: N
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Length 818;